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MEDICINE BOW-DIVIDE (Great Divide Resource Area)

Resource Management Plan
Final Environmental Impact Statement

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PROPOSED RESOURCE MANAGEMENT PLAN
and
FINAL ENVIRONMENTAL IMPACT STATEMENT
for the
GREAT DIVIDE RESOURCE AREA
(formerly Medicine Bow and Divide Resource Areas)
Rawlins District, Wyoming

Lead Agency: U.S. Department of the Interior, Bureau of Land Management

Type of Action: Administrative

Jurisdiction: Albany, Carbon, and Laramie counties and portions of Sweetwater County, Wyoming

Abstract: This document presents the proposed plan for managing federal land and federal mineral estate in south central and southeastern Wyoming. The area covered comprises 4 million acres of land in which surface and minerals are federally owned and 1 million additional acres in which only the minerals are federally owned ("split estate"). This public land is administered by the Great Divide Resource Area (formerly Medicine Bow and Divide resource areas), Rawlins District, Bureau of Land Management. The plan focuses primarily on three resource management issues relating to resource uses that affect vegetation, soils, and watershed values; suitability of areas for special management designations; and opportunities for improving resource accessibility.

This proposed RMP/final EIS incorporates by reference most of the material presented in the *Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas.* Four alternative management plans addressing each issue were considered in detail in the draft RMP/EIS: continuation of present management (Alternative A) and three other alternatives providing a range of choices ranging from restricting management actions or development to actively mitigating the effects of resource management actions or development. The proposed plan presented in this document is a refinement of Alternative D, the preferred alternative in the draft document. The changes from the draft RMP/EIS are described herein, as are the environmental consequences of the proposed plan. Comments on the draft document that were received from the public are reproduced in this document, along with responses from the Bureau of Land Management.

When the resource management plan is approved, the plan will provide a comprehensive framework for managing and allocating resources on the public land in the Great Divide Resource Area. Further information regarding this document can be obtained from the address below.

Bud Holbrook, Area Manager
Bureau of Land Management
Great Divide Resource Area
P.O. Box 670
Rawlins, Wyoming 82301
Telephone: (307) 324-4841

United States Department of the Interior

TAKE PRIDE IN AMERICA

BUREAU OF LAND MANAGEMENT
WYOMING STATE OFFICE
P.O. BOX 1828
CHEYENNE, WYOMING 82003

July 1988

Dear Reader:

Enclosed for your review and future reference is the *Proposed Resource Management Plan/Final Environmental Impact Statement for the Great Divide Resource Area (formerly Medicine Bow and Divide Resource Areas)* It presents the proposed resource management plan (RMP), which is a refinement of the preferred alternative presented in the draft document of 1987. In addition, it fulfills the requirements for preparation of a final environmental impact statement (EIS).

The draft version of this document, *Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas*, was published in 1987. The two resource areas were combined in August 1987 into a single administrative unit, the Great Divide Resource Area. The geographic area covered by this plan (called the "planning area" in the document) has not been changed by that reorganization.

Preliminary recommendations regarding wilderness study areas were published in 1987 in the *Wilderness Supplement to the Draft Resource Management Plan/Environmental Impact Statement for Medicine Bow Resource Area.* The final wilderness EIS will be available at a later date.

The environmental consequences of the proposed plan are discussed in this document, as are changes from the draft RMP/EIS. Comments received from the public and the Bureau of Land Management's responses to those comments also are included.

The draft Medicine Bow-Divide RMP/EIS will be required to accompany this final document. Copies of the draft are available from the Rawlins District BLM, P.O. Box 670, Rawlins, WY 82301.

All parts of the proposed RMP may be protested except the preliminary wilderness suitability recommendations. The procedures for protesting are delineated in 43 CFR 1610.5-2. Essentially, the procedures provide that a protest may be made by any person who participated in the planning process and has an interest that may be affected by the approval of the plan. Protests must be filed in writing with the Director of the BLM within 30 days after publication of a notice in the *Federal Register* that the Environmental Protection Agency has received the document containing the proposed RMP/final EIS.

Written protests must include (a) the name, mailing address, telephone number, and interest of the person protesting; (b) a statement of the issue and the parts of the plan being protested; (c) copies of all documents pertaining to the protest that the protester submitted during the planning process or an indication of the date the issue or issues were discussed for the record; and (d) a statement explaining why the protester believes the decision is wrong. Persons who want to protest should see "Protest Provision" in chapter 5 of this document, where the full process for protest is reproduced verbatim.

At the end of the 30-day protest period, the proposed RMP (excluding any portion under protest) will become final. If any significant change is made to the proposed RMP as a result of a protest, the changed portion will be made available for public review and comment before final approval and implementation of the plan. More information about protest procedures is included in chapter 5 of this document.

I want to personally thank those who have contributed to and participated in the development of this plan. I hope your involvement will continue as we move forward to implement and monitor the plan and manage the public lands and resources in the Great Divide Resource Area.

Sincerely yours,

Hillary A. Oden

Hillary A. Oden
State Director

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PROPOSED RESOURCE MANAGEMENT PLAN/ FINAL ENVIRONMENTAL IMPACT STATEMENT for the GREAT DIVIDE RESOURCE AREA (formerly Medicine Bow and Divide Resource Areas) RAWLINS DISTRICT, WYOMING

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
Rawlins, Wyoming
1988

Hillary A. Oden — 6-27-88

Wyoming State Director — Date

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Abbreviations

[Note: Many of theses terms are further defined in the draft RMP/EIS Glossary.]

ACEC	Area of critical environmental concern
AMP	Allotment management plan
APD	Application for permit to drill
APHIS	Animal and Plant Health Inspection Service, U.S. Department of Agriculture
AUM	Animal unit month
BLM	Bureau of Land Management, U.S. Department of the Interior
BuRec	Bureau of Reclamation, U.S. Department of the Interior
"C" allotments	See the Livestock Grazing appendix in draft RMP/EIS
CEQ	Council on Environmental Quality
cfs	Cubic feet per second
C&MU	Classification and Multiple Use Act of 1964
CFR	Code of Federal Regulations. Numbers refer to title and part; that is, 40 CFR 1500 refers to title 40, part 1500.
CRMP	Cultural resource management plan
CWA	Clear Water Act
dbh	Diameter at breast height
DEQ	Department of Environmental Quality, Wyoming
EA	Environmental assessment
EIS	Environmental impact statement
EPA	U.S. Environmental Protection Agency
FCC	Federal Communications Commission
FCLAA	Federal Coal Leasing Amendments Act of 1976
FLPMA	Federal Land Policy and Management Act of 1976
FS	Forest Service, U.S. Department of Agriculture
FMP	Fire management plan
gpm	Gallons per minute
GS	Geological Survey, U.S. Department of the Interior
HMA	Herd management area (for wild horses)
HMP	Habitat management plan
"I" allotments	See the Livestock Grazing appendix in draft RMP/EIS
KGS	Known geologic structure
KRCRA	Known recoverable coal resource area
"M" allotments	See the Livestock Grazing appendix in draft RMP/EIS
MBF	Thousand board feet
MFP	Management framework plan
mg/l	Milligrams per liter
MMBF	Million board feet
MSA	Management situation analysis
NAAQS	National ambient air quality standards
NEPA	National Environmental Policy Act of 1969
NNL	National natural landmark

Abbreviations

NTU	Nephelometric turbidity unit
NWPS	National Wilderness Preservation System
ORV	Off-road vehicle
PRIA	Public Rangelands Improvement Act of 1978
PRLA	Preference right lease application
PSD	Prevention of significant deterioration
R&PP	Recreation and public purposes
RAMP	Recreation area management plan
RCA	Raptor concentration area
RMP	Resource management plan
RPS	Rangeland program summary
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SCS	Soil Conservation Service, U.S. Department of Agriculture
SHPO	State Historic Preservation Office (or officer)
SMCRA	Surface Mining Control and Reclamation Act of 1977
SRMA	Special recreation management area
T&E	Threatened and endangered species
TDS	Total dissolved solids
TSP	Total suspended particulates
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	U.S. Fish and Wildlife Service
VRM	Visual resource management
WAAQS	Wyoming ambient air quality standards
WGFD	Wyoming Game and Fish Department
WSA	Wilderness study area

SUMMARY

INTRODUCTION

This document presents a proposed plan for the future management of federal land and federal mineral estate administered by the Great Divide Resource Area, Bureau of Land Management (BLM). The area covered comprises 4 million acres of land in which surface and minerals are federally owned and 1 million additional acres in which only the minerals are federally owned ("split estate"). The environmental impacts of the actions of the proposed plan are analyzed in chapter 4 of the document.

The Great Divide Resource Area encompasses BLM-managed public lands in four counties in Wyoming: Albany, Carbon, and Laramie counties and portions of Sweetwater County (see map 1).

PUBLIC INVOLVEMENT

The draft resource management plan/ environmental impact statement (RMP/EIS) for the Medicine Bow and Divide resource areas was released in June 1987. The public was invited to comment on the draft through a notice in the *Federal Register*, notices in local news media, and letters to those on the mailing list. Public hearings were held in August, and small group meetings also were held.

A total of 178 written or oral comments were received on the draft EIS. These comments and the BLM's responses are included in chapter 5 of this document.

CONTENT OF THIS DOCUMENT

This document is not a complete reprinting of the draft RMP/EIS; rather, it focuses on the proposed plan, which is a refinement of the preferred alternative (Alternative D) in the draft RMP/EIS. The environmental consequences of the proposed RMP are discussed, as are changes from the draft RMP/EIS. Public comments on the draft are included, along with the BLM's responses to those comments.

The draft RMP/EIS will be required as a reference to accompany the final RMP/EIS. The arrangement of reprinted or updated portions of the final RMP/EIS parallels the format of the draft RMP/EIS.

All maps necessary to understanding of the proposed plan are included in this document. Some are new, some have been revised from maps used in the draft document, and some are reproduced unchanged except for number and, in some cases, title.

CHANGES IN THE PROPOSED PLAN

Introduction

The proposed RMP is essentially the preferred alternative from the draft RMP/EIS for the Medicine Bow and Divide resource areas. A few modifications have been made to respond to public comment, to incorporate new information, or to make factual corrections. The most notable changes are summarized below.

Changes in Proposed Management

A portion of the Baggs Elk Crucial Winter Range has been proposed for designation as part of the Jep Canyon proposed ACEC.

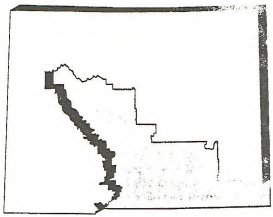
The area containing Gibben's beardtongue *(Penstemon gibbensii)* has been identified for withdrawal from locatable mineral location in the proposed RMP.

The Northeast Cow Creek area (7,325 public land acres containing 201.8 million tons of coal) and the Wild Horse Draw area (1,280 public land acres containing 1.7 million tons of coal) will not be considered for coal leasing because they do not contain coal with development potential. They will not be discussed further in this document.

Erroneous coal tonnages given in the draft have been corrected in this document.

Proposals for ORV designations for the Dune Ponds area have been clarified. Proposed ORV designations have been changed for the area west of Seminoe Reservoir to help preserve public access.

Identified areas of overlapping big game crucial winter habitat would be managed to maintain habitat quality.



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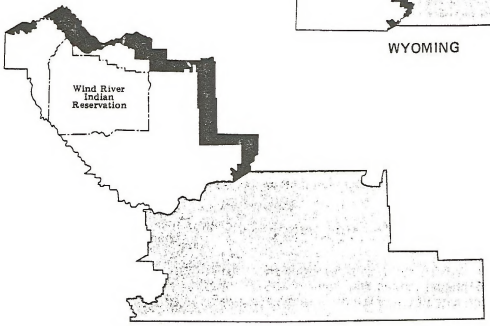

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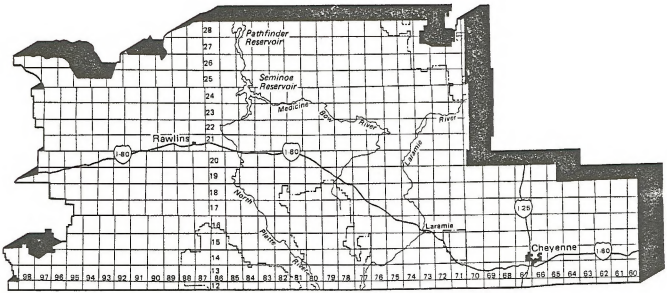

GREAT DIVIDE RESOURCE AREA

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Great Divide (Formerly Medicine Bow-Divide)
Resource Management Plan

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Chapter One

Purpose and Need; Issues and Criteria

INTRODUCTION

The *Proposed Resource Management Plan/Final Environmental Impact Statement for the Great Divide Resource Area (formerly Medicine Bow and Divide Resource Areas)* presents the proposed resource management plan (RMP) for the area described in the *Draft Resource Management Plan/ Environmental Impact Statement for the Medicine Bow and Divide Resource Areas,* which was published in 1987. The two resource areas were combined in August 1987 into a single administrative unit, the Great Divide Resource Area.

This document is not a complete rewrite of the draft version. It contains information on changes in proposals of the draft, corrections of any erroneous material, and in some cases more recent data. Chapter 2 presents the proposed resource management plan. Chapter 3 contains additions and corrections to the description of the affected environment in the draft RMP/EIS. The environmental consequences of the proposed plan are described in chapter 4. In chapter 5 we have described the consultation and coordination that have occurred since publication of the draft and updated the "Preparers" section. That chapter also contains a description of public meetings and a discussion of comments received, as well as copies of comment letters and responses to comments other than those pertaining to wilderness. (The comments on wilderness will be reproduced and answered in a separate document.)

All maps necessary to understanding of the proposed plan are included in this document. Some are new, some have been revised from maps used in the draft document, and some are reproduced unchanged except for numbers and, in some cases, title.

Most of the references cited in this document were included in the References section of the draft RMP/EIS, which readers may want to have available. A few additional references appear at the end of this document. Readers also may wish to refer to the Glossary included in the draft document.

PURPOSE AND NEED

When the final version of the RMP is approved, the plan will provide a comprehensive framework for management of the public land in the Great Divide Resource Area by the Bureau of Land Management (BLM). In addition, this document fulfills requirements for preparation of a final environmental impact statement (EIS).

As required by the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA), a range of alternatives was considered in the draft RMP/EIS. The proposed plan presented here is a refinement of the preferred alternative described in that document.

DESCRIPTION OF THE PLANNING AREA

The geographic area covered by this plan (called the "planning area" in the document) has not been changed by the reorganization of the two previous resource areas into one administrative unit. The only change is in the name of the area (see map 1).

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Chapter Two

The Alternatives

INTRODUCTION

The proposed RMP for the Great Divide Resource Area is described in this chapter. The proposed plan is essentially Alternative D, the preferred alternative, from the draft document. A few modifications were made to respond to public comments, to incorporate new information, and to make factual corrections. The most notable changes are summarized in the next section; following that, the entire proposed plan is described.

CHANGES TO THE PREFERRED ALTERNATIVE

Areas of Critical Environmental Concern

A portion of the Baggs elk crucial winter range has been identified for inclusion in the proposed Jep Canyon area of critical environmental concern (ACEC). The objectives and actions to be taken are detailed in the text describing the proposed plan.

The area with the rare plant Gibben's beardtongue (*Penstemon gibbensii*) has been identified for withdrawal from locatable mineral location.

Minerals Management

Factual corrections have been made of erroneous coal tonnages presented in the draft document. In addition, two areas listed in the draft as being considered for coal leasing would not be considered because they do not contain coal with development potential. These are the Northeast Cow Creek area (7,325 acres of public land containing 201.8 million tons of coal) and the Wild Horse Draw area (1,280 acres of public land containing 1.7 million tons of coal).

Recreation Management

A new map has been added to clarify the proposed off-road vehicle (ORV) designations for the Dune Ponds area. ORV designations have been changed for the area west of Seminoe Reservoir.

Wildlife Habitat Management

Areas where crucial winter habitat for different species of big game overlap have been identified. A new map delineates these areas, which have been identified for management to maintain habitat quality.

THE PROPOSED PLAN

Areas Considered for ACEC Designation

Definition and Factors Considered

FLPMA defines ACECs as follows:

> . . . areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

To be considered for ACEC designation, an area must meet the criteria of relevance and significance described in 43 CFR 1610.7-2 and in section 1617.81C1(a) of the BLM Manual.

An area may be considered relevant if special management attention is required to protect important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to prevent irreparable damage to these resources. Relevance may also be found if special management attention is required to protect life and safety from natural hazards. This applies either to areas that are developed or used or to areas where no development is required.

Significance or importance is indicated if a resource has qualities that make it a cause of concern or give it special worth, meaning, or distinctiveness, especially when compared to any similar resources. Such a resource must have more than local significance. Special management attention may be appropriate if a resource is fragile, sensitive, rare, irreplaceable, endangered, threatened, or vulnerable to adverse change. A natural hazard may be found important if it is a significant existing or potential threat to human life or property.

The amount of management attention required was considered when BLM personnel determined which nominated areas would be proposed for ACEC designation in the proposed RMP. If there is a high potential for resource conflicts in an area, so that extensive interdisciplinary involvement would be required to protect the identified resource or value, the special management attention given to ACECs would be required. On the other hand, such attention would not be required

in an area where standard management practices would provide adequate protection for the identified resource or value.

In addition to the considerations described above, BLM personnel also considered whether an ACEC designation would help the BLM to manage identified values, processes, or hazards.

Baggs Elk Crucial Winter Range

The objectives for management of the Baggs Elk Crucial Winter Range are to manage the entire 79,000 acres to maintain the integrity of crucial winter habitat for elk, to allow for development of oil and gas and coal, and to seek the cooperation of owners of adjacent property in management of the habitat (see map 2).

The Baggs Elk Crucial Winter Range was described on page 199 of the draft RMP/EIS. Under the proposed RMP, 13,320 acres of public land in the northern end of the crucial winter range would be included in the Jep Canyon Proposed ACEC, which also would include most of the Atlantic Rim raptor concentration area (described further under "Raptor Concentration Areas" later in this section). See maps 2 and 3 for location of these areas.

Damage of crucial winter habitat for elk from surface-disturbing activities would be minimized by application of the Wyoming BLM standard mitigation guidelines (see the appendix in this document). In addition, surface-disturbing activities would be intensively managed to prevent loss of significant elk winter habitat. This would entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Certain times of the year and certain areas would be avoided by spatial and temporal management of development, facilities, and uses.

Oil and gas leasing would be allowed with application of surface protection measures as described above.

The proposed Jep Canyon ACEC contains a major portion of the Atlantic Rim raptor concentration area. Surface-disturbing activities would be intensively managed to maintain raptor nesting habitat.

Plans of operations would be required for locatable mineral exploration and development (except casual use), regardless of the number of acres that would be disturbed in the proposed Jep Canyon ACEC.

In the remainder of the crucial winter range, plans of operations or notices would be required for locatable mineral exploration and development (except casual use) consistent with regulations. (A plan of operations would be required for disturbance of more than 5 acres.)

The BLM would cooperate with owners of adjacent property to manage the habitat, coordinate efforts with the Wyoming Game and Fish Department (WGFD), and recommend managing elk population objective levels at a number supportable by the existing habitat.

The rationale for selection of this management proposal is as follows: The 79,000-acre Baggs Elk Crucial Winter Range contains high value wildlife habitat, recreational values, and potential for the occurrence of oil and gas, coal, and other minerals. The focus of potential conflicts is in the north end of the crucial winter range. This area, which contains the Atlantic Rim coal area, is the most crucial habitat for the wintering elk herd.

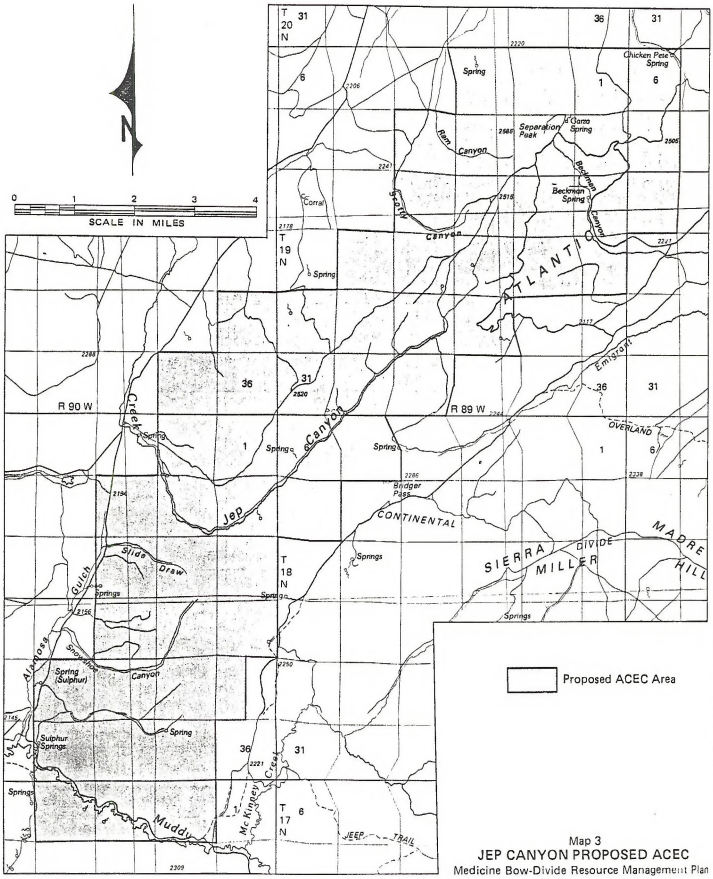
Public land is distributed in a checkerboard pattern, so BLM management will have considerable influence on future coal development. If the coal resource is developed, concentrated management attention will be required to maintain the integrity of the elk crucial winter range. ACEC designation would focus management emphasis on the 13,320-acre Jep Canyon area and would help ensure priority for achieving the management objectives.

In the part of the crucial winter range not proposed for ACEC designation, standard management practices would be sufficient to meet management objectives. The winter ranges would be maintained through application of the Wyoming BLM standard mitigation guidelines, along with intensive spatial and temporal management of surface-disturbing activities. The BLM could allow other resource uses and still protect this habitat.

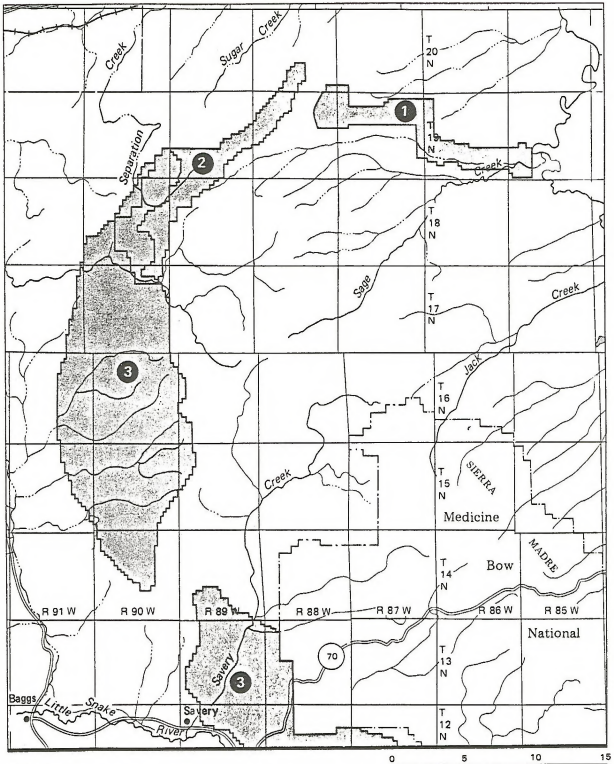
Como Bluff

The objectives for management of the 1,760-acre Como Bluff area are to manage it in a manner that would maintain the integrity of the Como Bluff National Register District/National Natural Landmark, to preserve historically significant sites, and to allow for mineral development. The national natural landmark (NNL) would be managed for its paleontological resource and historical values (see map 4).

Under the proposed plan, the entire Como Bluff area would be designated an ACEC. To minimize disturbance of paleontological resources and historical values, the Wyoming BLM standard mitigation guidelines would be applied to surface-disturbing activities. Surface-disturbing activities within ¼ mile of exposures of the Morrison For-



Map 3
JEP CANYON PROPOSED ACEC
Medicine Bow-Divide Resource Management Plan

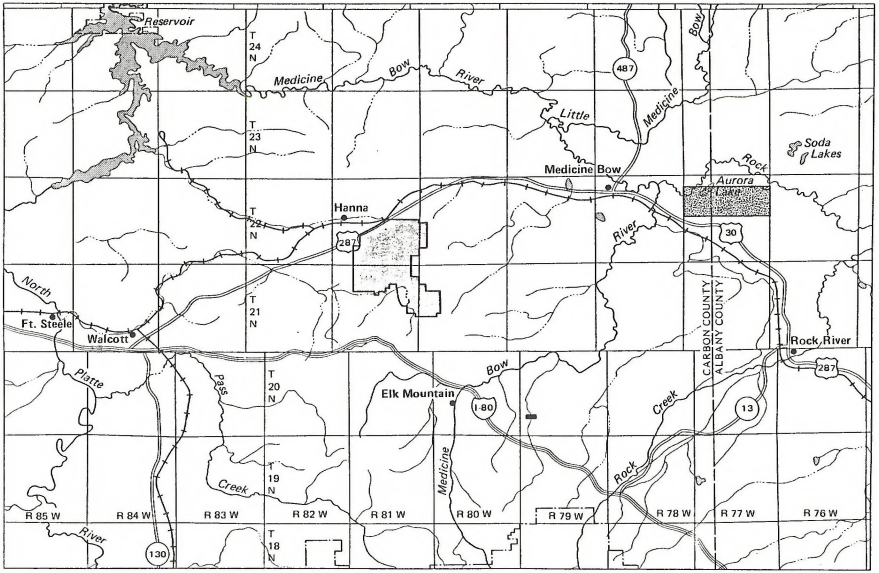


Areas Considered for ACECs

1. Bolton Rim RCA - No ACEC
2. Atlantic Rim RCA - Proposed Partial ACEC*
3. Baggs Elk Crucial Winter Range - Proposed Partial ACEC*

*See detailed map of Jep Canyon Proposed ACEC.

Map 2
SIERRA MADRE AREAS CONSIDERED FOR ACEC DESIGNATION
Medicine Bow Divide Resource Management Plan



Hanna Raptor Concentration Area - No ACEC

Como Bluff National Natural Landmark - Proposed ACEC

Intact Segment of the Overland Trail

Map 4

COMO BLUFF PROPOSED ACEC, HANNA RCA, AND OVERLAND TRAIL SEGMENT

Medicine Bow [illegible]ide Resource Management Plan

mation (a fossil-bearing formation) would be intensively managed. This would entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects.

Oil and gas leasing would be allowed with application of the Wyoming BLM standard mitigation guidelines as described above. Plans of operations would be required for locatable mineral exploration and development (except casual use) in the proposed ACEC, regardless of the number of acres that would be disturbed.

The rationale for selection of this management proposal is as follows: The 1,760-acre Como Bluff area, which contains an uncommon concentration of well-preserved Mesozoic fossils, played a historic role in the development of the science of paleontology. It also has moderate potential for oil and gas and locatable minerals. Any damage to the cultural and natural history resources of the area could easily be irreparable. ACEC designation would focus management emphasis on the area and help to ensure priority for surface protection requirements to prevent damage to the fragile resources.

Gibben's Beardtongue Site

The objectives for management of the 10-acre site containing a population of Gibben's beardtongue (*Penstemon gibbensii*) are to maintain or enhance the population of this rare plant (see map 5).

Under the proposed plan, the known population of Gibben's beardtongue would be protected from disturbance by maintenance of existing fencing around the population. ACEC designation is not proposed for this site. Established trend studies would be continued, and the area would be withdrawn from mineral location.

The rationale for selection of this management proposal is as follows: The existing fence adequately protects the site from disturbance by grazing animals. The trend studies being conducted would indicate any change in the condition of the plant population that might occur.

Since the site is so small and the species so rare, withdrawal from mineral location is being proposed to supplement other protective measures. Although there are no mining claims on the site at this time, there are some nearby, and location of additional claims is a definite possibility. If no withdrawal was implemented, half the site could be disturbed by locatable mineral activities before a plan of operations would be required under current regulations.

The Gibben's beardtongue population would be adequately protected from other sources of disturbance through application of the Wyoming BLM standard mitigation guidelines. ACEC designation would not enhance the BLM's ability to protect the population.

Muddy Gap Cushion Plant Community

The objective for management of the Muddy Gap Cushion Plant Community is to maintain or enhance the population of these rare plants (see map 6).

ACEC designation is not proposed for this site. Under the proposed plan, notices or plans of operations would be required for locatable mineral exploration and development (except casual use) consistent with regulations. (A plan of operations would be required for disturbance of more than 5 acres.)

The BLM would coordinate monitoring of the plant community with The Nature Conservancy. If monitoring should indicate a need for protective measures, they would be taken as necessary to protect the community.

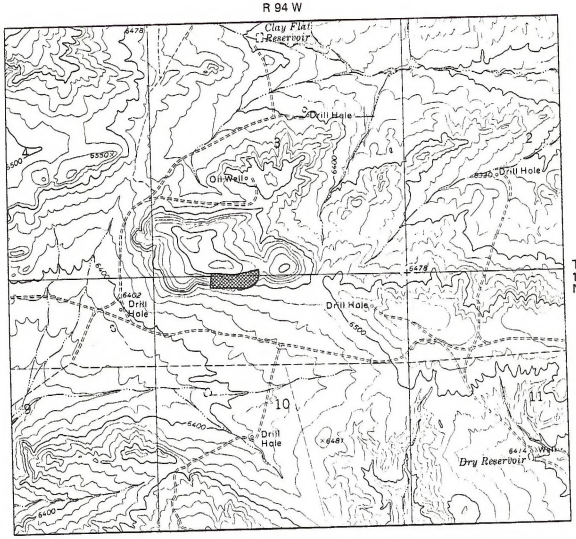
The rationale for selection of this management proposal is as follows: The 220-acre Muddy Gap cushion plant community area contains limestone deposits. The quality and quantity of these deposits may be sufficient to qualify for location of mining claims under the 1872 mining laws, but no interest in the limestone has been expressed in the past, and none is expected. Current surface management authority is sufficient to prevent unnecessary damage to the plant community if the limestone were developed.

ORV use or livestock grazing could damage the plant community, but the steep terrain makes such use unlikely. The population of the plant community would be adequately protected from other sources of disturbance through application of the Wyoming BLM standard mitigation guidelines. ACEC designation would not enhance the BLM's ability to protect the plant community.

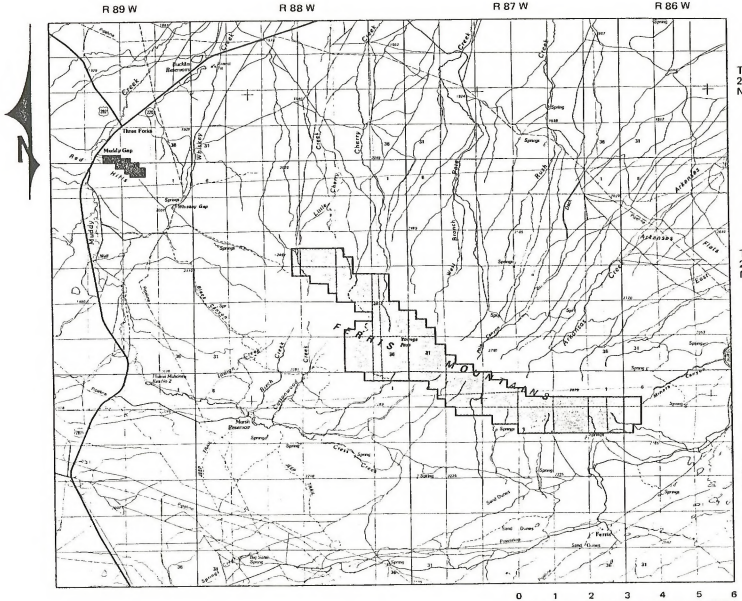
White Pelican Island

The objective for management of the White Pelican island is to maintain and enhance nesting habitat for a colony of white pelicans on the 12-acre island (see map 7).

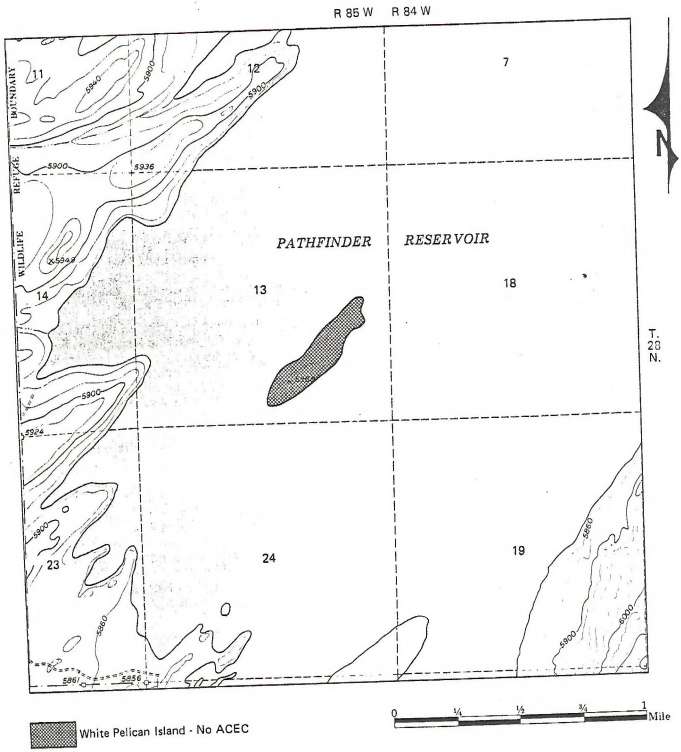
The White Pelican Island is not public land administered by the BLM. The Bureau of Reclamation (BuRec) is the administering agency. Under a memorandum of understanding with BuRec, the



Map 5
GIBBEN'S BEARDTONGUE SITE
Medicine Bow-Divide Resource Management Plan



Map 6
MUDDY GAP CUSHION PLANT COMMUNITY AND FERRIS MOUNTAINS RCA
Medicine Bow Divide Resource Management Plan



Map 7
WHITE PELICAN ISLAND
Medicine Bow-Divide Resource Management Plan

BLM manages the surface resources on the island. ACEC designation is not appropriate since the area is under another agency's administration.

Under the proposed plan, the BLM would pursue a cooperative agreement with the WGFD and BuRec for management of the island, and any actions would be carried out with the concurrence of BuRec. The white pelican population would be monitored for disturbance and habitat change.

The rationale for selection of this management proposal is as follows: ACEC designation would not be appropriate because the White Pelican Island is administered by another agency.

Monitoring is important because human activity at the wrong time could cause reproductive failure in the nesting pelican population for the year in which the activity occurred. The nesting colony also could be threatened by predation during reservoir drawdown, by erosion of the island, and by a reduction in the food base.

While the BLM has some capability to initiate habitat improvements on the island and public education efforts, our ability to manage some of the other threats to the nesting colony is limited. Under a cooperative management arrangement, other agencies can use their abilities in the areas of public education, enforcement, and maintenance of reservoir water levels to provide suitable habitat for prey fish.

Raptor Concentration Areas

The planning area contains a total of about 117,560 acres of raptor concentration areas (RCAs), as shown on map 8. The objectives for management of these areas are to manage resources so that productivity of nesting raptor pairs is maintained, to allow for development of coal and oil and gas, and to seek the cooperation of owners of adjacent property in management of raptor nesting habitat.

Under the proposed plan, the Wyoming BLM standard mitigation guidelines would be applied to surface-disturbing activities in all RCAs to reduce physical disturbance of raptor habitat and disturbance of the birds during certain periods.

The BLM would seek the cooperation of owners of adjacent property in management of raptor nesting habitat.

Most of the Atlantic Rim RCA would be included in the proposed Jep Canyon ACEC (see map 2). The Seminoe and Shamrock Hills RCAs have been proposed for ACEC designation (see map 9), making a total of about 36,600 acres of RCAs under ACEC designation.

To maintain raptor nesting habitat, surface-disturbing activities would be intensively managed in the RCAs covered by ACEC designation. This would entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Developments, uses, and facilities would be managed temporally and spatially to avoid certain times of the year and certain areas.

Oil and gas leasing would be allowed in the RCAs with appropriate application of the Wyoming BLM standard mitigation guidelines.

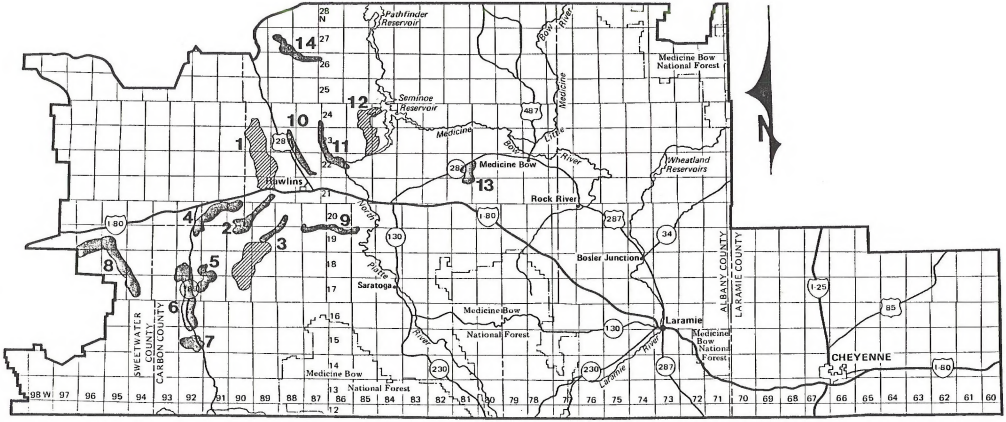
In RCAs designated ACECs, plans of operations would be required for locatable mineral exploration and development (except casual use), regardless of the number of acres in the ACEC that would be disturbed. In RCAs that would not be designated ACECs, a notice would be required for a disturbance of 5 acres or less; a plan of operations would be required for a disturbance of more than 5 acres.

The rationale for selection of this management proposal is as follows: The ferruginous hawk is a category 2 candidate species (see Glossary in the draft document). The approximately 27,500 acres proposed for ACEC designation in the Seminoe and Shamrock Hills RCAs historically have contained the highest concentrations of nesting ferruginous hawks in the planning area, and they contain the highest concentration at present. These birds are very sensitive to human disturbance.

Special attention to habitat management in these areas would enhance the status of the species. Development could occur under this proposal, but only with full consideration of the nesting birds. ACEC designation would focus management emphasis on the area and help to ensure priority for surface protection requirements adequate to maintain the productivity of nesting raptor pairs.

The portion of the Atlantic Rim RCA that lies within the Jep Canyon proposed ACEC does not contain ferruginous hawk habitat; however, it does contain a high concentration of other nesting raptors. The primary resource value for which the Jep Canyon is proposed for ACEC designation is elk crucial winter range. Management actions designed to maintain the value of this habitat also would help to maintain some of the raptor habitat values.

The RCAs that would not be designated ACECs under the proposed RMP do not contain the high concentrations of ferruginous hawks that are found in the Shamrock Hills and Seminoe RCAs. Standard habitat management practices and application of the Wyoming BLM standard mitiga-

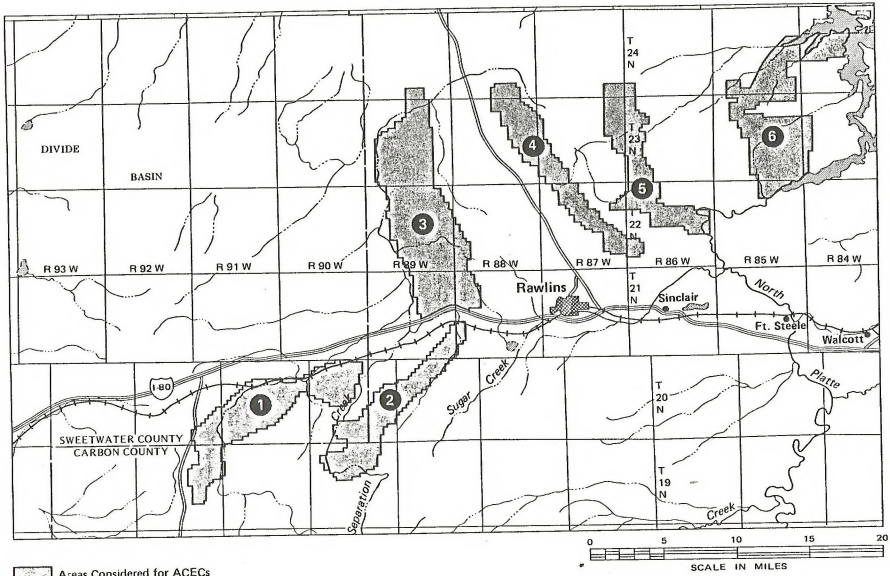


Map 8

MANAGEMENT PROPOSED FOR RAPTOR CONCENTRATION AREAS

(Revised From Draft Map 57)

Medicine Bow-Divide Resource Management Plan



Areas Considered for ACECs

1. Cherokee RCA - No ACEC
2. Red Rim RCA - No ACEC
3. Shamrock Hills RCA - Proposed ACEC
4. Brown Canyon Rim RCA - No ACEC
5. Platte Divide RCA - No ACEC
6. Seminoe RCA - Proposed ACEC

Map 9
AREAS NEAR RAWLINS CONSIDERED FOR ACEC DESIGNATION

tion guidelines would be sufficient to maintain the productivity of nesting raptor pairs in these areas. ACEC designation would not enhance the BLM's ability to protect the nesting habitat in these areas.

Sand Hills

The objectives for management of the 8,300-acre Sand Hills area are to protect the unique vegetation complex, to maintain wildlife habitat values, to minimize soil erosion, and to promote recreational opportunities (see map 10).

Under the proposed plan, the Sand Hills area would be designated an ACEC. The unique vegetation complex of the Sand Hills area would be adequately protected from other sources of disturbance through application of the Wyoming BLM standard mitigation guidelines and through intensive management of surface-disturbing activities. Intensive management would entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Developments, uses, and facilities would be managed temporally and spatially to avoid damage to the vegetation.

Oil and gas leasing would be allowed in the Sand Hills area with appropriate application of the Wyoming BLM standard mitigation guidelines.

Plans of operations would be required for locatable mineral exploration and development (except casual use), regardless of the number of acres that would be disturbed in the ACEC.

Motor vehicle use would be limited to existing roads and trails. Rehabilitation and mitigation practices would be carried out in specific problem areas.

BLM personnel would conduct intensive inventories to identify the locations of existing roads and trails, areas that mule deer avoid because of human activities, and areas where soil disturbance and wind erosion are concentrated.

In cooperation with interested parties, the BLM would develop action plans to mitigate effects in identified mule deer behavioral avoidance zones and to rehabilitate concentrated soil disturbance and wind erosion. (Behavioral avoidance zones for wildlife species occur because of human activities and other factors. A further explanation of avoidance zones appears in paragraph 7 of page 477 of the draft document.)

The rationale for selection of this management proposal is as follows: The 8,300-acre Sand Hills area contains high value wildlife habitat and recreational opportunities, moderate oil and gas potential, a unique vegetation complex, and highly erodible soils. There is a high potential for conflicts among these values. For example, the major recreational use is hunting, which often is associated with ORV use. In some parts of the area there are so many two-track ways that soil erosion has been accelerated beyond acceptable limits. In addition, mule deer may be avoiding certain areas.

The actions proposed in this plan would help the BLM to manage the area in a manner that would minimize these potential conflicts. Intensive inventories of the area would ensure that management would address problem areas without unnecessarily affecting other uses. Accelerated rates of erosion could be stopped and/or reversed by limitation of ORV use to existing roads and trails. ACEC designation would focus management emphasis on the area and help to ensure priority for surface protection requirements adequate to minimize soil erosion and to maintain the unique vegetation complex and wildlife habitat values. Intensive management of surface-disturbing activities spatially and temporally also would be possible.

Cultural Resources/Natural History Management

Cultural Resources

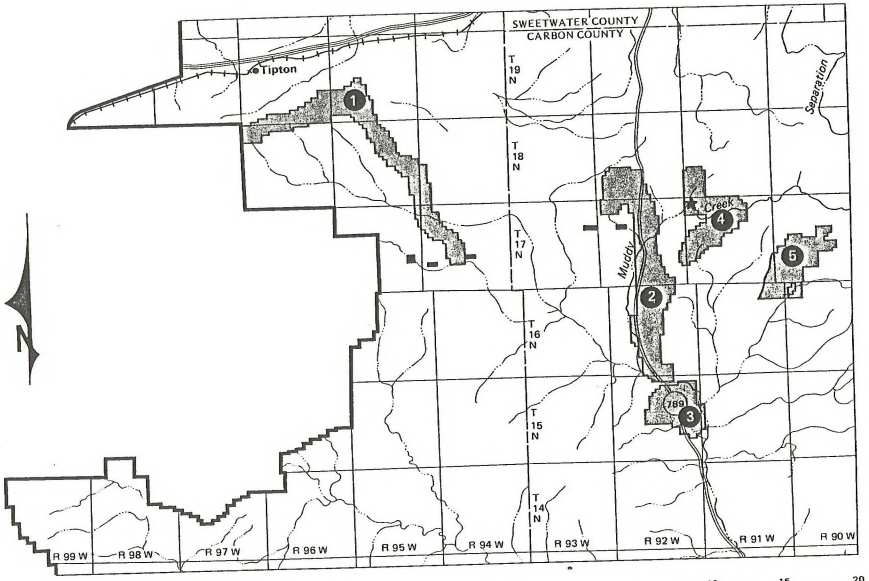
The objective for management of cultural resources is to stabilize and protect significant sites and segments along the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail.

Under the proposed plan, the BLM would seek listing on the National Register of Historic Places for eligible sites. The BLM would take actions as appropriate to meet the objective for significant trail segments. This could include such actions as fencing to prevent disturbance of certain intact trail segments or stabilization of deteriorating buildings.

The BLM would pursue opportunities to acquire legal access to trail segments, where appropriate. Access would facilitate administrative actions and make improved and stabilized cultural sites available to the public.

Other actions pertaining to cultural resources are described in the "Minerals" section under "Leasable Minerals—Oil and Gas" and "Locatable Minerals."

The rationale for selection of this management proposal is as follows: National Register listings would establish the importance of significant


SWEETWATER COUNTY
CARBON COUNTY
Tipton
T 19 N
T 18 N
T 17 N
T 16 N
T 15 N
T 14 N
Muddy
Creek
Separation
789
R 99 W
R 98 W
R 97 W
R 96 W
R 95 W
R 94 W
R 93 W
R 92 W
R 91 W
R 90 W
N
0 5 10 15 20
SCALE IN MILES
Areas Considered for ACECs
1 Delaney Rim RCA - No ACEC
2 Muddy Creek RCA - No ACEC
4 Doty Mountain RCA - No ACEC
5 Sand Hills Area - Proposed ACEC
Washakie Stage Station
Map 10
OVERLAND TRAIL SEGMENTS
AND AREAS NORTH OF BAGGS
CONSIDERED FOR ACEC DESIGNATION
Great Divide Basin Resource Management Plan

sites and help to ensure their preservation for the future. Actions in the proposed plan would help to stabilize and protect significant sites along the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail. Standard management actions and the Wyoming BLM standard mitigation guidelines also would protect cultural resources.

Natural History

The objectives for management of natural history resources are to maintain the integrity of existing and proposed NNLs and to maintain the integrity of the scientific value of significant paleontological resources.

Under the proposed plan, the Wyoming BLM standard mitigation guidelines would be applied to surface-disturbing activities to maintain the natural history values of the existing and proposed NNLs. Proposed actions involving surface disturbance in these areas would be considered case by case.

Lands totaling 160 acres in the Gangplank proposed NNL, 640 acres in the Big Hollow NNL, and 160 acres in the Sand Creek NNL would be considered for disposal to individuals, organizations, agencies, or institutions that would manage these areas in accordance with their NNL status (see map 11).

As described in the section on ACECs, the Como Bluff National Register District/NNL (1,760 acres) is proposed for ACEC designation and would be managed for its paleontological resources and historical values.

Paleontological resources would be managed through the use of the Wyoming BLM standard mitigation guidelines and discretionary management authority. Inventories would be conducted case by case for each proposed surface-disturbing activity.

The rationale for selection of this management proposal is as follows: The BLM's management ability is limited in the Gangplank proposed NNL, the Big Hollow NNL, and the Sand Creek NNL by lack of legal access to the relatively small public land parcels in areas that are predominantly under other ownerships. Disposal of the isolated parcels to individuals, organizations, agencies, or institutions that would manage these areas in accordance with their NNL status would enhance management of the natural history values.

Management of the Como Bluff National Register District/NNL as described in the ACEC section would help preserve the cultural and paleontological values of the area and maintain the integrity of the NNL.

Application of the Wyoming BLM standard mitigation guidelines and discretionary management authority would help to preserve significant paleontological resources for future study.

Fire Management

The objectives for fire management are (a) to concentrate fire suppression efforts in areas containing high resource and/or human values and in areas with intermingled landownership patterns, and (b) to use prescribed fire to help meet the objectives of other programs (such as the reduction of fuels or the maintenance and/or improvement of wildlife habitat or range condition).

Under the proposed plan, different areas in the planning area would be designated for different levels of fire suppression, as follows:

Full Suppression: Approximately 60% of the planning area would be designated as a full suppression area with no equipment restrictions.

Full Suppression With Management Options: Approximately 3% of the planning area would be designated as a full fire suppression area "with management options"; that is, restrictions may be placed on the use of standard full suppression firefighting techniques.

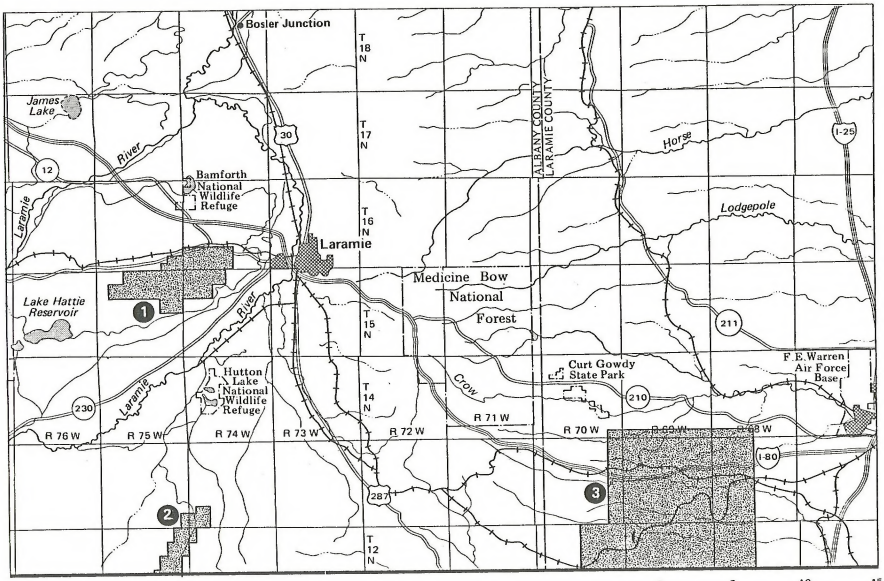
Limited Suppression: Approximately 36% of the planning area would be designated a limited fire suppression area.

The remaining 1% of the planning area would be proposed for a limited suppression classification following consultation and agreement with the landowners in the area. If agreement could not be reached to allow limited suppression of wildfires, the area would be managed under a full suppression classification.

Map 12 shows areas proposed for the different levels of suppression.

The resource area would prepare a fire management plan containing criteria for protecting high resource values such as significant cultural resources, crucial winter range for big game, high priority watersheds, and high-value scenic areas. The fire management plan would include operational aspects of implementing limited suppression designations. The plan also would provide that an escaped fire analysis be conducted to determine the appropriate course of action if fires could not be contained within the first burning period or if they exceeded the criteria established for limited suppression.

Prescribed burning would be used to achieve management objectives such as those for allot-



National Natural Landmark (NNL)

1. Big Hollow NNL
2. Sand Creek NNL
3. Gangplank Proposed NNL

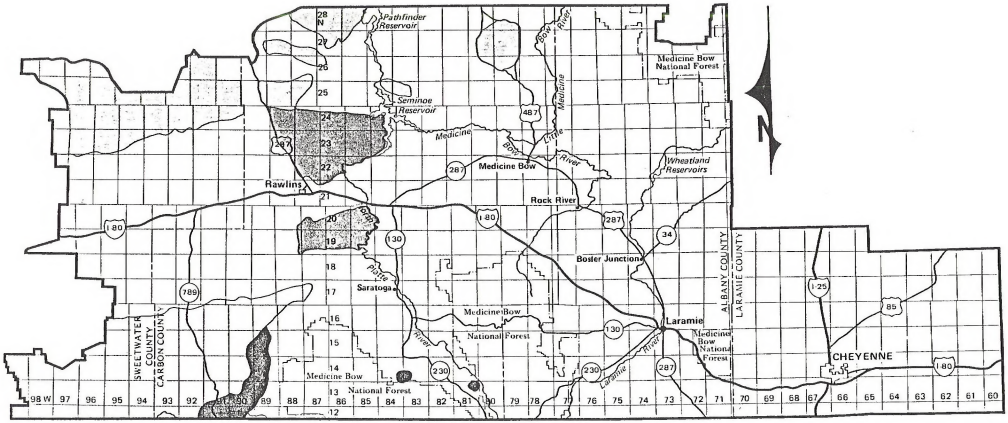
Note: Public lands in these NNLs would be considered for disposal to individuals, organizations, agencies, or institutions that would manage the areas in accordance with their NNL status.

Map 11
NATIONAL NATURAL LANDMARKS
LARAMIE AND CHEYENNE AREAS
Medicine Bow-Divide Resource Management Plan

Sand Creek NNL

3 Gangplank Proposed NNL

...izations, agencies, or institutions that would manage the areas in accordance with their NNL status.



Full Suppression

Limited Suppression

Limited Suppression (Need Landowner Consent)

Full Suppression with Management Alternatives

Map 12
FIRE MANAGEMENT
(Draft Map 3)
Medicine Bow-Divide Resource Management Plan

ment management plans (AMPs) and habitat management plans (HMPs). Prescribed burning would be conducted in a manner that would avoid violation of the Wyoming and National ambient air quality standards.

The rationale for selection of this management proposal is as follows: Designation of fire suppression zones would help the BLM to utilize funding efficiently while providing adequate protection for high resource and/or human values.

The use of prescribed fire as a management tool can be cost-effective and environmentally desirable when properly applied. Case-by-case consideration of proposals for prescribed fire use would ensure that such use would be environmentally acceptable and consistent with the objectives of specific activity plans.

Forest Management

The objective for forest management is to enhance growth and diversity of the forestlands through management practices including harvesting at a recently recalculated allowable harvest level that incorporates revised harvesting restrictions.

Timber Harvesting

Four types of areas would be identified in the 111,403 acres of forestland: lands available for intensive management of forest products (19,159 acres), lands available for restricted management of forest products (6,707 acres), lands where forests would be managed to enhance other uses (85,228 acres), and forestlands not available for management of forest products (309 acres). Proposed management for each of these types of areas is described in the following paragraphs.

The allowable harvest level would be 20 million board feet (MMBF) per decade. This would be harvested from the 25,866 acres of commercial forestlands available for intensive or restricted management of forest products, which amounts to 23% of the total forestland in the planning area.

The BLM would manage the 19,159 acres of lands available for intensive management of forest products (see map 13) to achieve a highly productive forest by implementing activities that would enhance tree growth and health. Full consideration would be given to multiple-use values. Timber sales would be concentrated in these areas.

Timber would be harvested from the 6,707 acres of lands available for restricted management of forest products, but practices such as clearcutting would be restricted. Included in this category are areas such as steep slopes and riparian areas with the buffer zones surrounding them.

Forest management activities would be conducted only to enhance other resource values or uses on the 85,228 acres in the third category. Aspen and other noncommercial tree species are included in this category.

The 309 acres not available for management of forest products would not be included in the timber production base. These lands are not harvestable because of the small size of the stands, their scattered locations, or terrain limitations.

Other Management Practices

Precommercial thinning would be carried out to meet the forest management objective. It is projected that this would involve about 150 acres within the next 15 years and about 150 to 200 acres per year thereafter.

Stands of unmerchantable, nonproductive lodgepole pine would be eradicated and replaced with young, vigorous trees to meet the forest management objective. It is projected that this would involve about 500 acres over the next 20 years.

Minor wood products such as firewood, poles, posts, Christmas trees, and wildings would be available on demand.

The BLM would pursue opportunities to acquire or maintain legal access to the areas of public land listed below to support intensive management of commercial forestland:

Areas of High Importance: Elk Mountain, Shirley Mountains, Arlington, Little Medicine

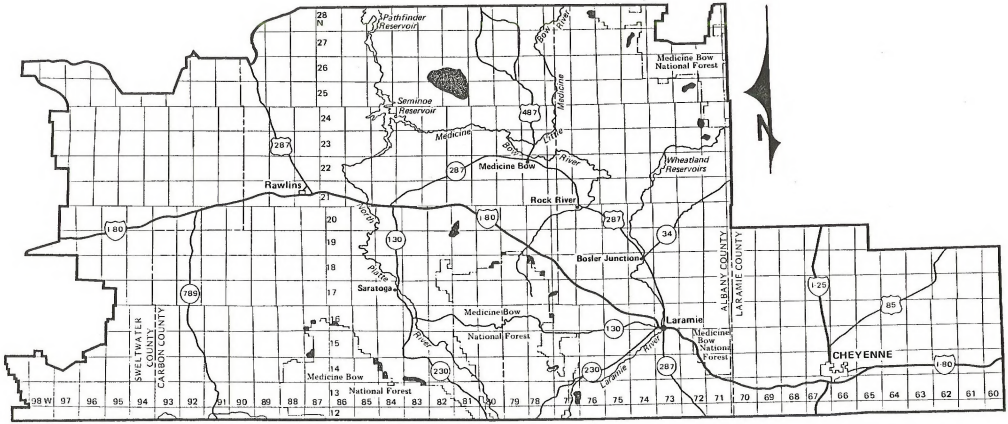
Areas of Moderate Importance: White Rock Canyon, Toltec, North Laramie River, Pine Mountain/Split Rock

Areas of Low Importance: Woodedge, Seven Mile, Sugarloaf

Consolidation of landownership on Elk Mountain and Shirley Mountain would be considered as opportunities arose. This action would have a moderate priority. If accomplished, it would increase the efficiency of forest management.

The rationale for selection of this management proposal is as follows: The productivity of the commercial forestlands in the planning area would be enhanced by the actions in the proposed plan, and timber would be made available to the wood products industry.

The intensive timber management activities of thinning and stand eradication would be imple-



Forestlands with Potential for Intensive Management

Map 13
FORESTLANDS WITH POTENTIAL FOR INTENSIVE MANAGEMENT
(Draft Map 20)
Medicine Bow-Divide Resource Management Plan

mented in the 23% of the total forestlands that would be available for intensive or restrictive management of forest products. These intensive management activities would be conducted with consideration for other resource values, including recreation, visual resources, wildlife habitat, and soil, water, and air resources. Where practicable, the BLM would take actions to enhance those values.

The proposed harvest level would be about 77% of the sustained-yield capacity of the planning area, a level that could be sustained in perpetuity with current technology. Other resource values also would be considered.

Because forest management activities would be conducted only to enhance other resource values in 85,228 acres, multiple-use values would benefit in those areas. Management in those areas would be tailored specifically to benefit other identified resource values or uses, including watershed and wildlife habitat.

Lands Program

Introduction

The objective for management of the lands program is to pursue balanced management by allowing utility/transportation systems in the entire planning area under appropriate restrictions, by avoiding high-value lands when routes are selected for utility/transportation systems, by considering disposal of isolated, unmanageable lands or lands needed for community expansion, by seeking protective withdrawals only on unique resources or facilities, and by revoking unneeded withdrawals.

Utility/Transportation Systems

All public lands would be open to utility/transportation systems, but such systems would be located next to existing facilities whenever possible.

For protection of important resource values such as those listed under "Leasable Minerals—Oil and Gas," the Wyoming BLM standard mitigation guidelines for surface-disturbing activities would be applied to activities related to utility/transportation systems.

Areas identified on map 14 would be avoided in plans for new facility placement and routes. If it became necessary for facilities to be placed within avoidance areas, effects would be intensively mitigated.

The rationale for selection of the management proposal for utility/transportation systems is as follows: Designation of utility corridors has been tried in the planning area in the past, but complete inventory information and environmental analyses were not available, particularly regarding cultural resources and wildlife. Because of this lack of information and the "checkerboard" landownership pattern in much of the planning area, designation of corridors did not reduce requirements for environmental analyses or improve coordination between jurisdictional entities. Only corridors that exist because of current use have the potential to reduce the need for environmental analyses or to reduce jurisdictional problems.

The proposed plan would allow flexibility in placement of new utility/transportation systems yet prevent proliferation of new routes. A policy of encouraging placement of systems next to existing facilities where appropriate would help to streamline the process while allowing consideration of other locations. Important and sensitive resource values would be protected by application of the Wyoming BLM standard mitigation guidelines to utility/transportation systems and by avoidance of specific areas known to contain such values.

Communication Sites

Site categories would be established for all existing communication sites according to the following criteria:

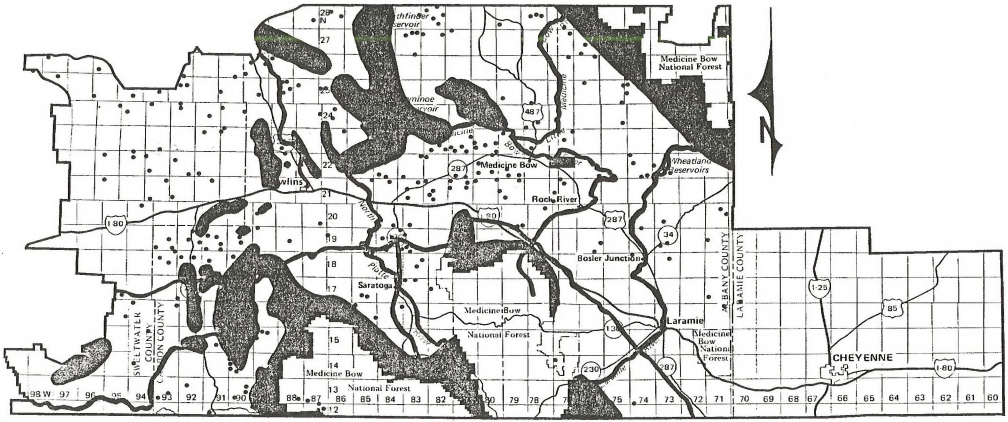
High-power communication sites would be reserved for broadcast television and radio transmitters of 100 watts or more.

Low-power communication sites would be reserved for microwave, mobile telephone/radio, and other transmitters using fewer than 100 watts.

Proposed locations for communication sites in both categories are shown on map 15.

A 2-mile buffer from other transmission facilities would be maintained around each site to ensure its integrity. Communication site plans would be developed for all existing sites, and a site plan would have to be prepared before the BLM would approve any new facility.

The rationale for selection of the management proposal for communication sites is as follows: Through establishment of site categories, placement of buffers around transmission facilities, and development of site plans, communication needs would be met and conflicts among site users would be minimized.



The following areas would be avoided, if possible, when permits are granted for surface-disturbing activities. If avoidance is not possible, each situation would be individually analyzed considering facility features, use, time of year, construction techniques, and human presence. Impacts would be carefully mitigated by intensive reclamation, special construction techniques, etc.

Steep Slopes (not shown on map - covers 8% of planning area)

Riparian Areas / Surface Water (only main water bodies shown on map - covers 3½% of planning area)

High Priority Habitat (not shown on map - covers 6% of planning area - may overlap other areas)

Sage Grouse Strutting Grounds (locations on map are approximate - these areas will be avoided whether or not they are presently known)

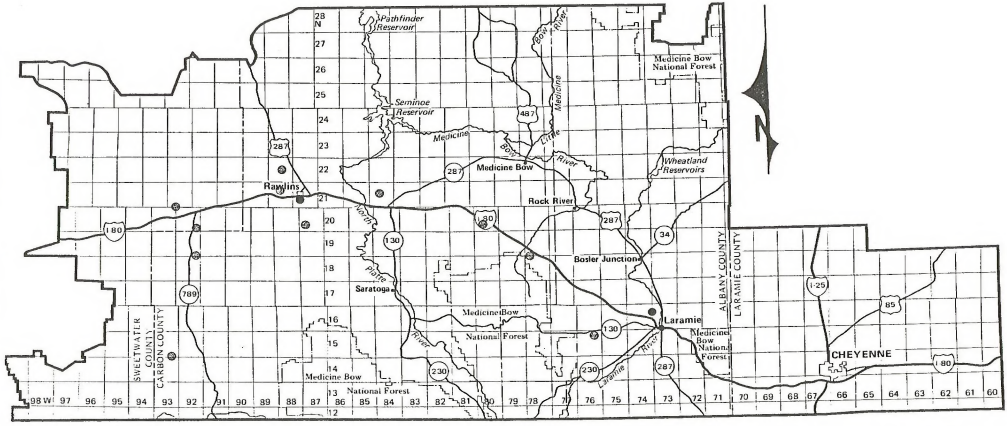
VRM Class I and II Areas, Baggs Elk Crucial Winter Range, Como Bluff Natural History Site, Sand Hills Area, Historic Trails, Raptor Concentration Areas, and Recreation Areas.

Map 14

UTILITY/TRANSPORTATION SYSTEMS AVOIDANCE AREAS

(Revised From Draft Map 4)

Medicine Bow-Divide Resource Management Plan



- High Power Communication Site
- Low Power Communication Site

Map 15
COMMUNICATION SITE CATEGORIES
(Draft Map 5
Medicine Bow Divide Resource Management Plan

Landownership Adjustments

Disposals under the Recreation and Public Purposes Act (R&PP disposals) and proposed land exchanges would be considered case by case when such actions would be consistent with the objectives of this RMP.

The BLM has identified a total of 66,000 acres of public land that appear to meet the FLPMA criteria for disposal. This land can be considered for disposal by any appropriate means permitted under the land laws. Before taking any disposal action, the BLM would give individual consideration to each tract, including public involvement. Specific tracts and the applicable FLPMA criteria are identified on maps 16, 17, 18, and 19.

The rationale for selection of the management proposal for landownership adjustments is as follows: The proposed plan would allow the BLM to improve management efficiency in areas with scattered landownership patterns and to respond to community needs for expansion and economic development.

To prevent disposal of tracts containing important values, the BLM would dispose of any parcel in the 66,000 acres already identified only after site-specific consideration. Proposals for exchanges and R&PP disposals would be considered throughout the planning area in the future, as would any proposals for disposal of lands not identified as meeting the FLPMA criteria for disposal. However, which specific tracts would be included cannot be predicted. These proposals would be considered only if they were consistent with the objectives of the RMP.

Access

The need for access is discussed under "Cultural Resources," "Forest Management," and "Recreation." The BLM would pursue opportunities to acquire or maintain legal access to the following areas, which are listed by level of importance:

High Importance

Arlington (forestry)
Atlantic Rim (recreation)
Big Creek (recreation)
Elk Mountain (forestry)
Ferris Mountains (recreation)
Little Medicine (forestry)
Miller Hill (recreation)
Shirley Mountain (forestry, recreation)

Moderate Importance

North Laramie River (forestry)
Pine Mountain-Split Rock (forestry)
Rawlins Uplift (recreation)
Seminoe-Pathfinder (recreation)
Toltec (forestry)
White Rock Canyon (forestry)

Low Importance

Seven Mile (forestry)
Sugarloaf (forestry)
Woodedge (forestry)
Continental Divide Trail (recreation)

Areas of access need are shown on map 20. This listing does not preclude consideration of acquisition of additional access as opportunities arise or as needs are identified.

The rationale for selection of the management proposal for acquisition of access is as follows: Legal access is necessary for effective implementation of the identified programs. In some cases, administrative access for BLM personnel or specific management actions would be sufficient. In other cases, public access would be desirable. Under the proposed RMP, the BLM's efforts would be concentrated on gaining or maintaining legal access in a manner acceptable to all parties involved.

Withdrawals and Classifications

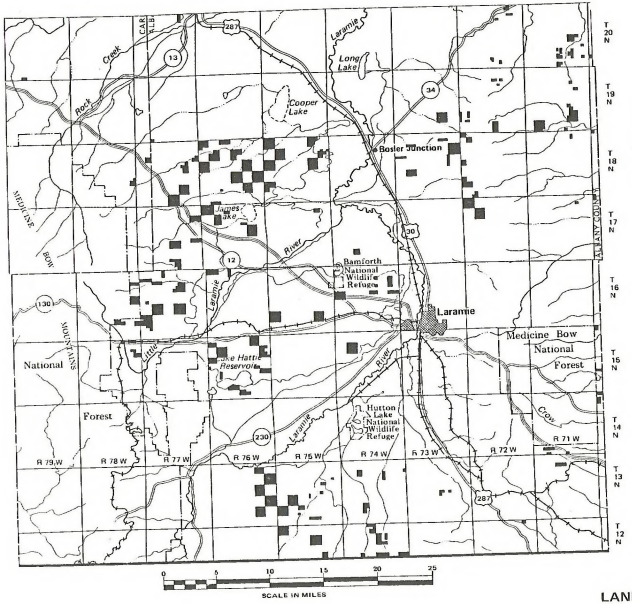
For the purposes of this document, classifications that segregate public land from operation of the land laws (such as disposal), mineral location, and/or mineral leasing are discussed as withdrawals.

Under the proposed plan, the planning area would be open to operation of the public land laws except for the following withdrawals:

A total of 81,489 acres of existing withdrawals that segregate land from operation of the land laws (such as disposal) or mineral location. These withdrawals are listed under "Locatable Minerals" in the "Minerals" section.

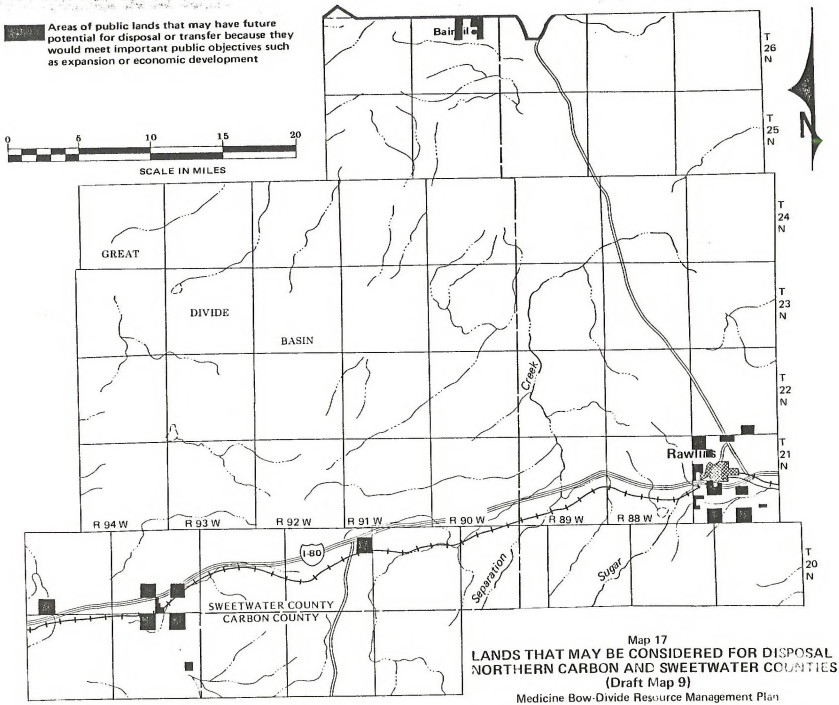
The 1,570 acres of proposed new withdrawals listed under "Locatable Minerals." These withdrawals would segregate land from operation of the land laws (such as disposal) or mineral location.

The following existing withdrawals, totaling 213,490 acres: power sites, 5,150 acres; stock driveways, 193,983; and public water re-



Areas of public lands that may have future potential for disposal or transfer because they are isolated and difficult to manage

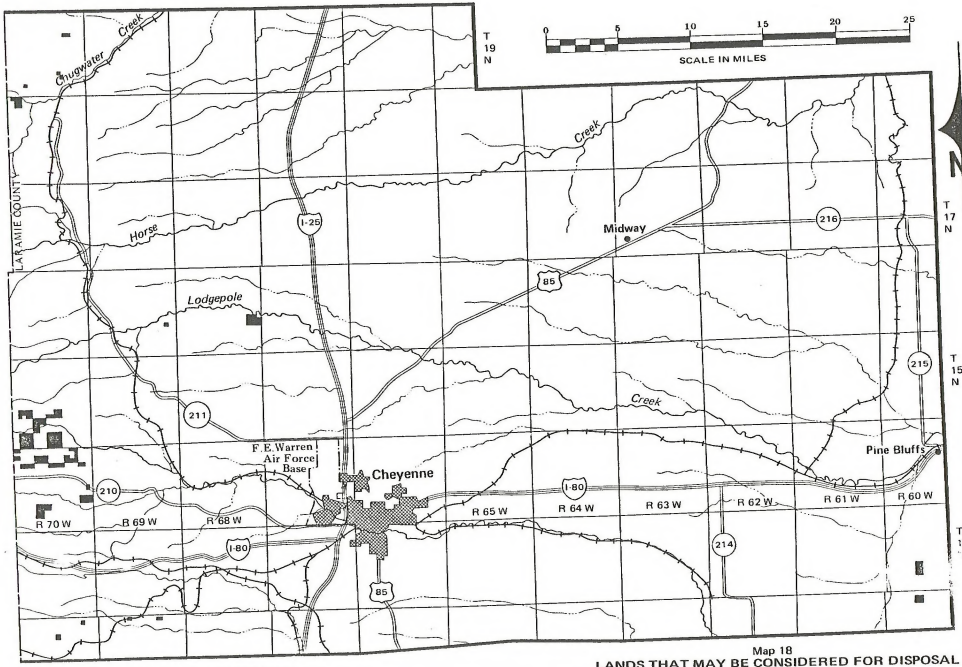
Map 16
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
ALBANY AND EASTERN CARBON COUNTIES
(Revised From Draft Map 8)



Map 17

LANDS THAT MAY BE CONSIDERED FOR DISPOSAL NORTHERN CARBON AND SWEETWATER COUNTIES (Draft Map 9)

Medicine Bow-Divide Resource Management Plan

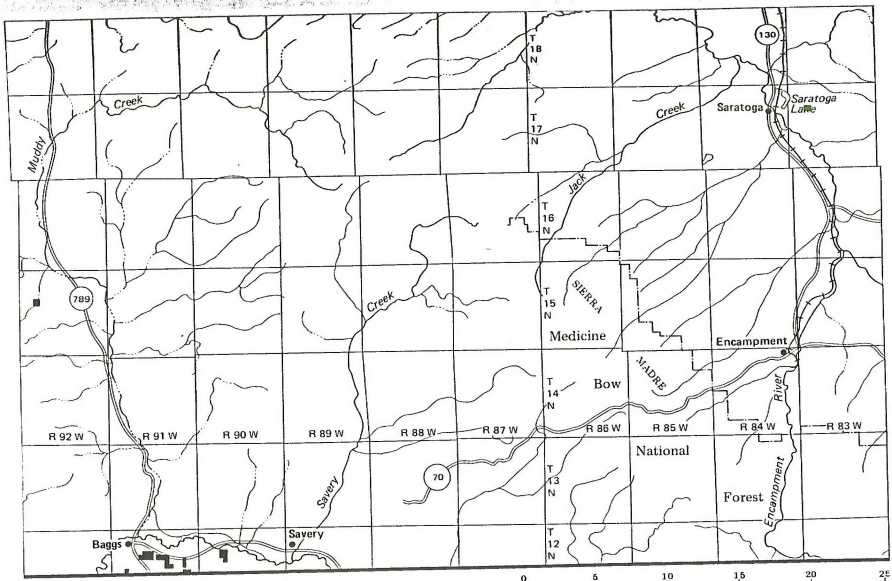


Map 18
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
LARAMIE COUNTY

Areas of public lands that may have future

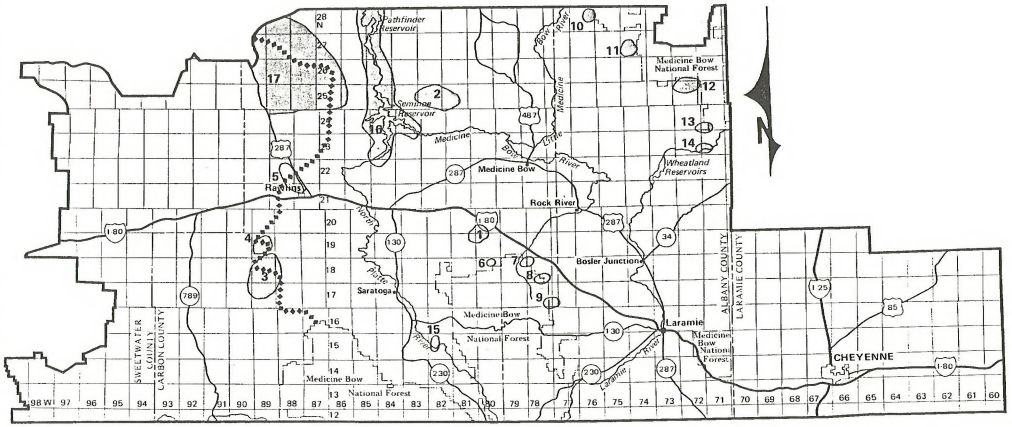
Areas of public lands that may have future potential for disposal or transfer because they are isolated and difficult to manage

LARAMIE COUNTY
(Draft Map 10)



Areas of public lands that may have future potential for disposal or transfer because they would meet important public objectives such as expansion or economic development

Map 19
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
SOUTHEAST CARBON COUNTY
(Draft Map 11)
Medicine Bow-Divide Resource Management Plan



Area of Access Need

Continental Divide Trail

1 Elk Mountain
2 Shirley Mountains
3 Miller Hill
4 Atlantic Rim
6 White Rock Canyon
7 Arlington
8 Woodedge
9 Seven Mile
10 Little Medicine
11 Toltec
12 North Laramie River
14 Sugarloaf
15 Big Creek
16 Seminoe-Pathfinder Reservoirs
17 Ferris Mountains

Map 20
AREAS OF ACCESS NEED
(Draft Map 12)

serves, 14,357. These withdrawals segregate land from operation of the land laws (including disposal) but not from mineral location.

There is minimal overlap among the withdrawals listed.

All remaining existing withdrawals and classifications would be reviewed individually, and unless the review indicated a need to continue a specific withdrawal or classification, all would be revoked. Revocations could not be implemented until *National Wildlife Federation v. Burford et al.* is resolved. This court case is discussed on page 20 of the draft RMP/EIS.

Maps 21, 22, and 23 show the withdrawals. Table 1 details the proposed management of withdrawals under the proposed plan.

The rationale for selection of the management proposal for withdrawals is as follows: FLPMA requires individual review of existing withdrawals and classifications before they can be revoked; therefore, individual revocations would receive careful consideration.

Most of the planning area is temporarily segregated from disposal by Classification and Multiple Use (C&MU) classifications (see the Glossary in the draft document). The provisions of FLPMA now accomplish the protection formerly provided by these segregations.

Of the existing 263,258 acres of stock driveway withdrawals, only 193,983 acres are still used for trailing purposes.

Revocation of the withdrawals and classifications mentioned above would eliminate duplicative or unnecessary protection, while the remaining withdrawals that would not be revoked under the proposed RMP would protect important areas for public benefit.

Livestock Grazing Management

Under the Proposed RMP, the livestock grazing management for the portions of the planning area covered by the Divide Rangeland Program Summary (RPS) and the Seven Lakes RPS would continue unchanged. (The separate grazing EIS areas are shown on map 24.) Actions would be taken to maintain or improve forage availability and ecological condition in those areas on the basis of monitoring information. The objective and management actions that follow pertain to the Medicine Bow grazing EIS area.

The objective for management of livestock grazing in the Medicine Bow grazing EIS area is to enhance livestock grazing while a balance is maintained between economic uses and the enhancement of wildlife habitat, watershed, and riparian areas.

To meet the livestock grazing objective, the BLM would maintain or update existing AMPs and develop new AMPs for "I" (improve) category allotments. (Allotment categories are explained in the Livestock Grazing appendix to the draft RMP/EIS.)

Grazing systems would be designed to achieve the livestock grazing objective (see Livestock Grazing appendix to the draft EIS for allotment-specific actions).

Grazing treatments designed to meet the livestock grazing objective would be incorporated into the grazing systems for AMPs in "I" category allotments (see page 376 in the draft document).

Various practices would be implemented to improve the condition of riparian areas. Livestock would be excluded from some riparian areas until they improved sufficiently to support limited seasonal grazing. The development of grazing systems is another method that could be used to improve riparian areas, and other treatments also could be implemented in some riparian areas.

BLM personnel would collect and analyze monitoring data to determine if the livestock grazing objective was being achieved.

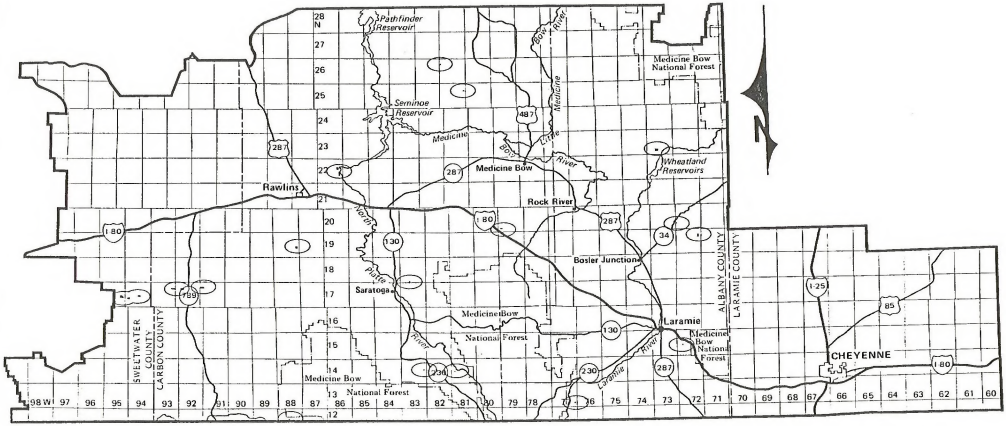
The BLM would give special attention to maintenance of wildlife habitat on 13,140 acres that contain crucial winter range for big game and other important wildlife habitat areas, also would receive special attention (see maps 25, 26, and 27).

Livestock grazing would continue to be excluded from the Pennock Mountain Big Game Winter Range (6,285 acres), the Wick Brothers Wildlife Management Unit (320 acres), the Laramie Peak Wildlife Habitat Management Unit (2,858 acres), the Sybille Game and Fish Research Unit (680 acres), and the Split Rock/Duck Creek Agreement Area (1,760 acres).

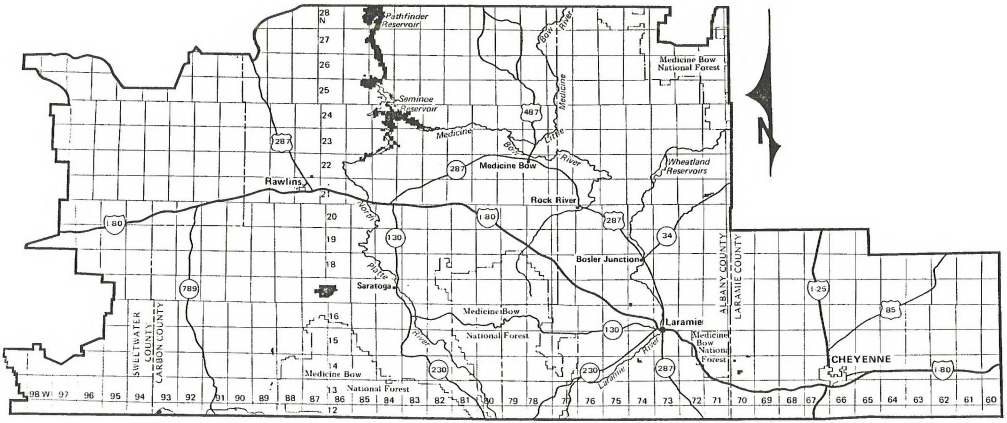
Range improvements would be designed to achieve the livestock grazing objective.

Requests for changes in seasons of use or kind of livestock would be considered case by case. In addition, requests for changes in kind of livestock from sheep to cattle would be considered with management actions to maintain or improve riparian condition.

It is projected that the long-term authorized livestock use would be about 186,972 AUMs as a result of the actions to be implemented. Grazing adjustments, if required, would be based on reliable vegetation monitoring studies, consultation and coordination, inventory, or a combination of these sources.

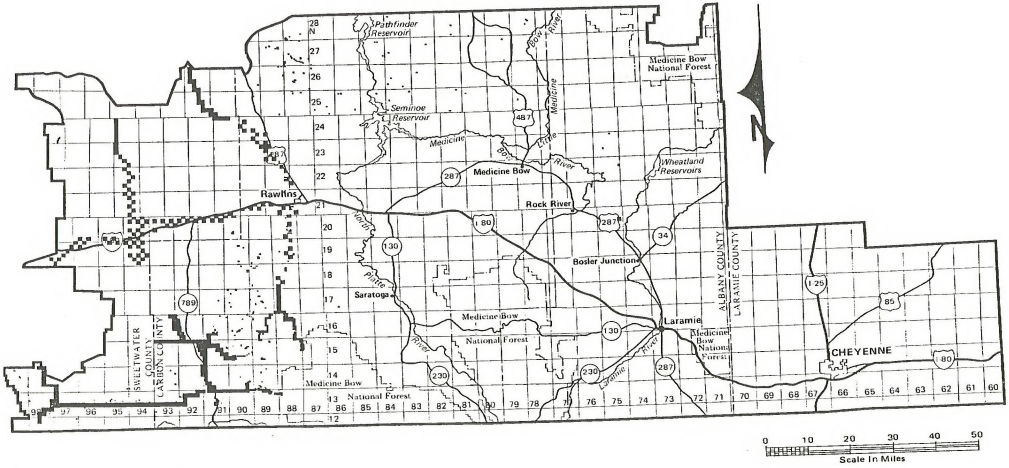


Map 21
NEW WITHDRAWALS
(Draft Map 13)



Withdrawals which prohibit disposals and agricultural or mineral entry

Map 22
WITHDRAWALS WHICH PROHIBIT DISPOSALS AND AGRICULTURAL OR MINERAL ENTRY
(Draft Map 14)
Medicine Bow-Divide Resource Management Plan



Withdrawals which prohibit disposals and agricultural entry

Map 23
WITHDRAWALS WHICH PROHIBIT DISPOSALS AND AGRICULTURAL ENTRY

TABLE 1

WITHDRAWAL SUMMARY

Type of Withdrawal	Acreage Originally Withdrawn	Proposed RMP		
		For New Withdrawal	Retain Withdrawal	Revoke Existing Withdrawal
Existing Mineral Withdrawals[1]				
Stratton hydrology	2,694	0	2,694	0
R&PP classifications				
—held by lessee	1,144	0	1,144	0
—classified only	4,197	0	0	4,197
Administrative sites (BLM)	93	0	6	87
Administrative sites (FS)[2]	720	0	0	720
Reclamation (BuRec)[2]	73,290	0	73,290	0
Wildlife refuges (FWS)	3,915	0	3,915	0
Air navigation sites (FAA)	440	0	440	0
Public water reserves[2,3]	41,245	0	0	31,738
C&MU classification[4]	3,916	0	0	3,916
Small tract	15	0	0	15
Oil shale	564,758	0	0	564,758
Coal classifications	671,768	0	0	671,768
Coal withdrawals	610,170	0	0	610,170
New Mineral Withdrawals[1]				
Encampment campground	0	10	0	0
Corral Creek campground[5]	0	20	0	0
Bennett Peak campground	0	20	0	0
Teton Reservoir campground[5]	0	160	0	0
Pryor Flats campground[5]	0	40	0	0
Dugway recreation site	0	320	0	0
Nine-Mile recreation site	0	40	0	0
Como Bluff paleontological site	0	0	0	0
Cherokee, Overland, and Rawlins-Fort Washakie historic trails	0	0	0	0
Fort Washakie stage station	0	640	0	0
Overland Trail	0	680	0	0
Big Creek proposed recreation site	0	5	0	0
Prospect Creek proposed recreation site	0	5	0	0
Jelm Mountain proposed proposed recreation site	0	10	0	0
Shirley Mountain proposed campground[5]	0	20	0	0
Gibben's beardtongue site	0	10	0	0

TABLE 1 (Continued)
WITHDRAWAL SUMMARY

Type of Withdrawal	Acreage Originally Withdrawn	Proposed RMP		
		For New Withdrawal	Retain Withdrawal	Revoke Existing Withdrawal
Existing Land Withdrawals[6]				
Power sites	5,150	0	5,150	0
Stock driveways	263,258	0	193,983	69,275
Public water reserves[3]	0	4,850	9,507	0
C&MU classification[4]	3,641,500	0	0	3,641,500
Totals[7]	**3,651,000**	**6,830**	**290,000**	**3,646,000**

ABBREVIATIONS: BLM = Bureau of Land Management, U.S. Department of the Interior; BuRec = Bureau of Reclamation, U.S. Department of the Interior; FAA = Federal Aviation Administration; FS = Forest Service, U.S. Department of Agriculture; FWS = Fish and Wildlife Service, U.S. Department of the Interior.

[1] These withdrawals would segregate the land against operation of the public land laws, including the 1872 General Mining Law.

[2] These withdrawals are scheduled for future review. The recommendations from the reviews will be arrived at on a case-specific basis and may differ slightly from those reflected in this table. It is possible that portions of the Bureau of Reclamation withdrawals may be revoked, returning the lands to the jurisdiction of BLM.

[3] The original public water reserve withdrawals segregated against the location of nonmetalliferous minerals only. Withdrawal review reports completed in 1982 revealed that this segregation is unnecessary to protect the water sources. Public Water Reserve 107 also said that all water sources existing on the date of the withdrawal order were protected and withdrawn even if they were not noted to the official records. Therefore, 4,850 acres of unrecorded water sources and 9,507 acres of recorded public water reserves are shown as lands withdrawals.

Public water reserves withdrawn under Secretarial Order 107 and other classification orders would be reviewed to determine if they meet the retention requirements of legal opinions of the solicitor of the Department of the Interior and of the agreement made between the state of Wyoming and the Department of Justice (for the Department of the Interior) regarding the adjudication of water rights. Withdrawals would be terminated on public water reserves that do not meet retention requirements.

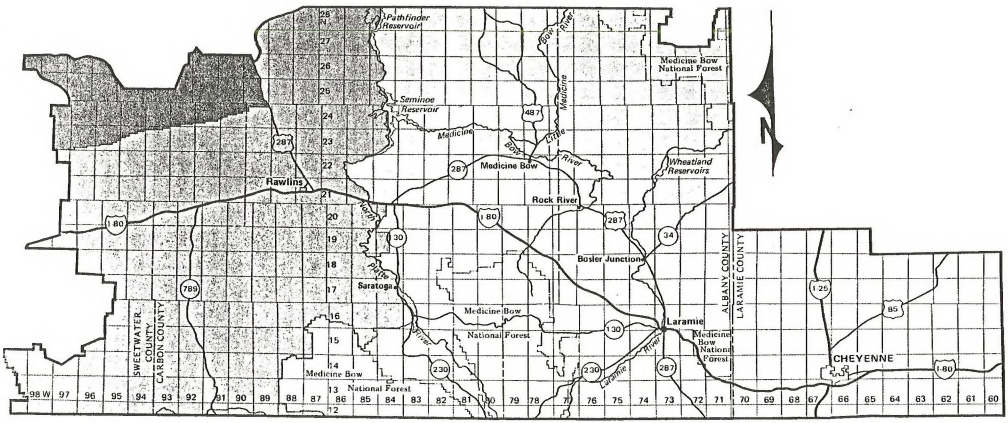
[4] The Classification and Multiple Use Act of 1964 mandated that the BLM consider classifying lands for disposal and for multiple use management. Within the lands classified for multiple use, areas could be further protected by segregation against mineral entry. A notice of classification in the *Federal Register* of November 8, 1967, classified 3,650,000 acres in the planning area for retention and multiple use management. Of this total, 3,916 acres of high value recreation land were segregated from mineral entry.

Under the proposed RMP, the C&MU classification would be removed in its entirety. Some of the recreation sites that previously had C&MU protection would need to be protected by withdrawals under the proposed RMP. Therefore, new withdrawal proposals (not previously presented) appear for the proposed RMP.

[5] These areas are protected under the 1967 C&MU classification (see footnote 4).

[6] These withdrawals would segregate the land against operation of the public land laws but not the 1872 General Mining Law.

[7] These totals are approximate. Many of the withdrawals overlap one another. See maps 21, 22, and 23 for lands where withdrawals would occur under the proposed RMP.



Seven Lakes Grazing EIS Area

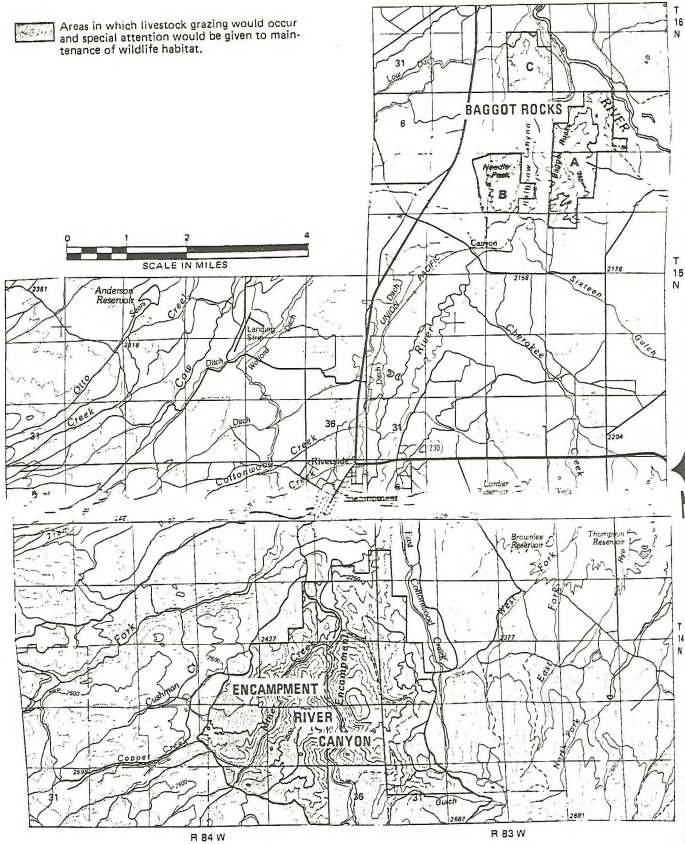
Divide Grazing EIS Area

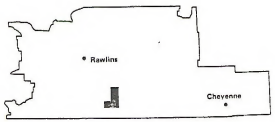
Medicine Bow Grazing EIS Area

Note: The Seven Lakes and Divide Grazing EIS Areas are covered in another document.

Map 24
MEDICINE BOW GRAZING EIS AREA
(Draft Map 2)
Medicine Bow-Divide Resource Management Plan

Areas in which livestock grazing would occur and special attention would be given to maintenance of wildlife habitat.





Map 25
BAGGOT ROCKS AND ENCAMPMENT RIVER CANYON IMPORTANT WILDLIFE HABITATS PROPOSED FOR SPECIAL LIVESTOCK GRAZING MANAGEMENT
(Revised From Draft Map 58)
Medicine Bow-Divide Resource Management Plan

The projected range improvements necessary to achieve the livestock grazing objective would be 130 miles of fence, 113 water developments, and 69,808 acres of vegetation manipulation. Vegetation manipulation techniques would include the use of fire.

It is projected that it would be necessary to exclude livestock grazing from 67 acres of riparian areas until the areas improved sufficiently to support limited seasonal grazing. It is further projected that 1,658 acres of other riparian areas would be improved either by development of grazing systems to include riparian pastures or by implementation of other treatments.

The rationale for selection of the management proposal for livestock grazing management in the Medicine Bow grazing EIS area is as follows: The management actions proposed would improve ecological condition and increase the amount of forage available for all grazing animals. Monitoring data would form the basis for livestock grazing adjustments. If monitoring indicated improved condition and increased forage availability, and if the needs of other grazing animals and watershed management had been met, an increase in grazing preference could be considered. Under the proposed actions, riparian condition would be improved without unnecessarily excluding livestock grazing.

Minerals Management

Leasable Minerals

Coal

The objectives for management of the federal coal resource in this planning area are (a) to provide for both short- and long-range development of federal coal in an orderly and timely manner, consistent with the policies of the federal coal management program, environmental integrity, national energy needs, and related demands; (b) to protect important resources by specifying whether federal coal can be leased for surface, subsurface, or in situ mining methods; and (c) to allow analysis of alternative areas in consideration of future leasing activities.

Coal Acceptable for Leasing Consideration. Under the proposed plan, coal would be acceptable for further consideration for leasing (through lease applications or coal activity planning) in the areas listed below:

Hanna Basin—26,590 acres of public land containing 168.2 million tons of coal

North Indian Springs—3,840 acres of public land containing 25.0 million tons of coal (acceptable for leasing consideration only for in situ coal development)

Indian Springs—2,500 acres of public land containing 25.0 million tons of coal (acceptable for leasing consideration only for in situ coal development)

Red Rim—9,720 acres of public land containing 40.6 million tons of coal

China Butte—6,240 acres of public land containing 73.9 million tons of coal

Atlantic Rim—3,650 acres of public land containing 79.1 million tons of coal

The areas with potential for coal development are shown on map 28. The mitigative measures developed in the coal screening process would be applied in these areas as described in the Coal appendix to this document.

A total of 3,450 acres of public land in the Hanna Basin area containing 22.8 million tons of coal were found unacceptable for further consideration for leasing during the coal screening process because of multiple-use conflicts and through application of the unsuitability criteria. (The screening process is described in the Coal appendix to this document.)

All other areas would be unavailable for leasing consideration.

Development Sequence. A north-to-south coal development sequence would be followed in the entire area west of Rawlins and south of I-80 as needs were identified. Coal development in the southern part of that area might strain the capability of communities there to accommodate growth; the proposed north-to-south development sequence should serve to direct population to communities in the northern part of the area, where development is needed.

The development sequence described above would depend on the Savery preference right lease applications (PRLAs) not being developed in the foreseeable future (USDI, BLM and GS 1983—see Additional References in this document). Should a PRLA eventually result in a coal lease, sensitive environmental and socioeconomic concerns would have to be considered with regard to development of that lease. One possible way these concerns could be protected would be through avoidance of coal development on these PRLA lands. To this end, the BLM might consider an exchange, but this could be done only after the applicant had acquired a lease by demonstrating the presence of commercial quantities of coal that are economically developable.

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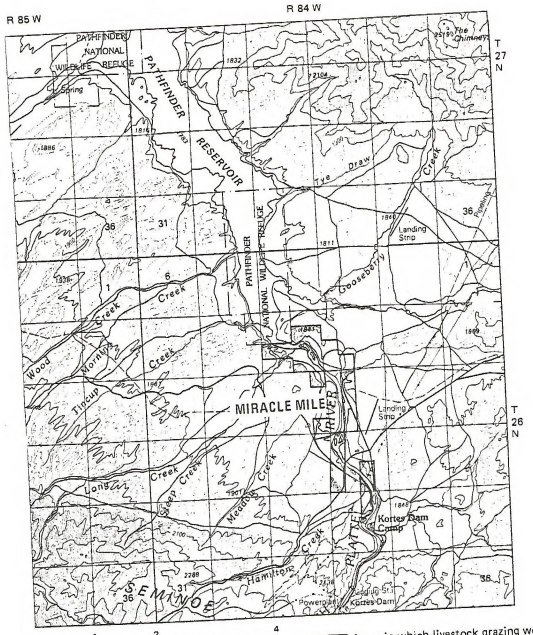
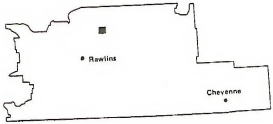
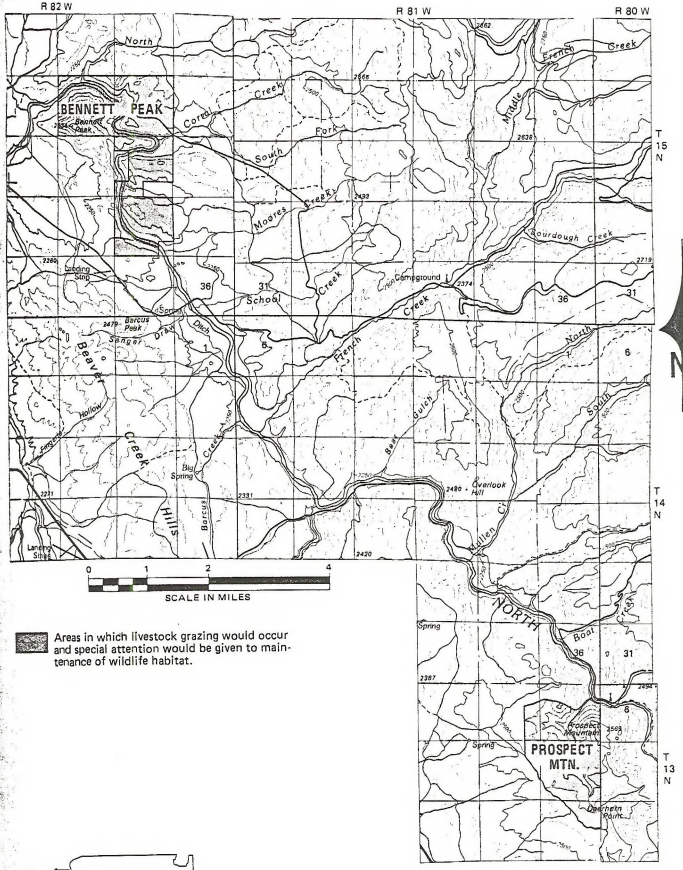
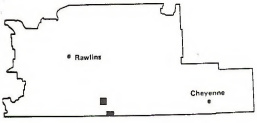




Map 27
MIRACLE MILE
IMPORTANT WILDLIFE HABITATS PROPOSED TO
SPECIAL LIVESTOCK GRAZING MANAGEMENT
(Revised From Draft Map 60)
Medicine Bow-Divide Resource Management



Areas in which livestock grazing would occur and special attention would be given to maintenance of wildlife habitat.

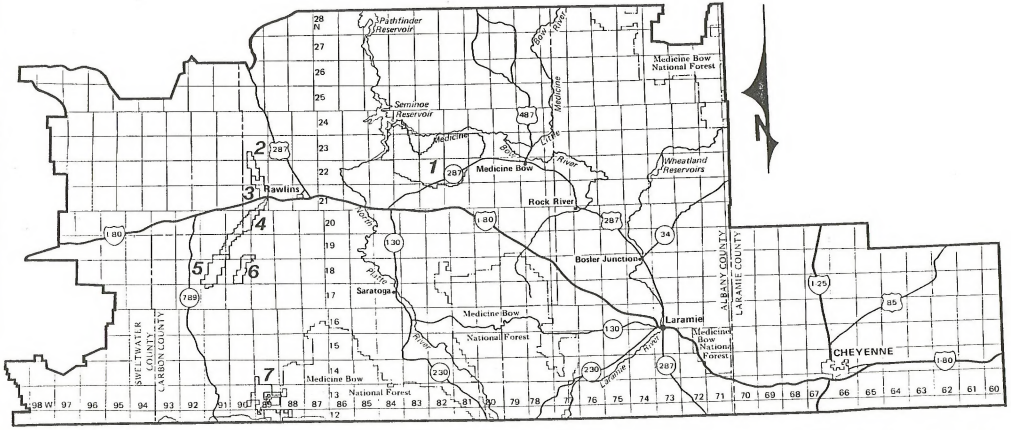


Map 26

BENNETTT PEAK AND PROSPECT MOUNTAIN IMPORTANT WILDLIFE HABITATS PROPOSED FOR SPECIAL LIVESTOCK GRAZING MANAGEMENT

(Revised From Draft Map 59)

Medicine Bow-Divide Resource Management Plan



1 Hanna Basin
2 North Indian Springs
3 Indian Springs
4 Red Rim
5 Great Divide
6 Atlantic Rim
7 Savery PRLA

Map 28
AREAS WITH POTENTIAL FOR COAL DEVELOPMENT
(Revised From Draft Map 24)

The BLM would process all applications for leasing in areas identified as acceptable for further consideration for coal leasing. For each application, BLM would conduct a site-specific environmental analysis and would consider the development sequence described above and other environmental and socioeconomic factors.

Rationale. The rationale for selection of the management proposal for the federal coal resource is as follows: Under the proposed plan, the BLM would have adequate flexibility to respond to changes in the demand for coal from a pool of areas found to be acceptable for further consideration for leasing with appropriate protective or mitigating stipulations.

The mitigation and protection requirements developed when the coal screening process was conducted (described in the Coal appendix) would ensure that sensitive resource values would be considered. In addition, site-specific environmental analysis would be conducted before any of the areas would be leased and again before mining began. Thus, the proposed plan would give the BLM the flexibility to respond to changes in demand while giving full consideration to social and environmental concerns.

Oil and Gas

The objective for management of oil and gas resources is to provide for leasing, exploration, and development of oil and gas while protecting other resource values.

Under the proposed plan, 5 million acres would be open to oil and gas leasing subject to the Wyoming BLM standard mitigation guidelines.

Leases would be issued with surface disturbance restrictions to protect the resources listed in table 2.

TABLE 2

ACREAGES WITH SURFACE DISTURBANCE RESTRICTIONS

Type of Area	Estimated Acreage
Steep slopes	320,000
Riparian areas and/or perennial surface water	140,000
Historic trails	43,000
VRM Class I and Class II areas	194,000
Existing and proposed recreation sites	560
North Platte River SRMA (1/4 mile on either side of the river)	3,550
Special management areas, as follows:	
Sage grouse leks	22,900
High priority wildlife habitat	240,000
Raptor concentration areas (see map 8)	60,020
Baggs crucial winter range for elk	79,000
Overlapping big game crucial winter range	122,880

NOTE: The above acreages are estimates based on the best available information. They are intended to give the reader a concept of the area involved. Some acreages may overlap. Leases would be issued on approximately 1.4 million acres with seasonal restrictions to protect wildlife during critical periods. This acreage includes raptor concentration areas, sage grouse and sharp-tailed grouse nesting habitat, and big game crucial winter range and birthing areas. It overlaps with some of the acreages listed above.

Leases would be issued on approximately 1.4 million acres with seasonal restrictions to protect wildlife during critical periods (see the Standard Mitigation Guidelines appendix). This acreage includes raptor concentration areas, sage grouse and sharp-tailed grouse nesting habitat, and big game crucial winter range and birthing areas. It overlaps with some of the acreages listed in table 2.

Oil and gas leasing would be allowed subject to the Wyoming BLM standard mitigation guidelines in the Sand Hills area (ACEC, 8,300 acres), the Como Bluff area (ACEC, 1,760 acres), and the raptor concentration areas (of which 36,600 acres would be in ACECs and 80,960 acres would be outside ACECs). In addition, surface-disturbing activities would be restricted and intensively managed to maintain important resource values in the ACECs, the Baggs Elk Crucial Winter Range (see ACEC section), and the overlapping crucial winter ranges for big game.

All lands open to oil and gas leasing also would be available for geophysical exploration subject to the the Wyoming BLM standard mitigation guidelines.

The rationale for selection of the management proposal for oil and gas resources is as follows: Under the proposed RMP, the entire planning area would be available for oil and gas leasing while sensitive resources and values would be protected with appropriate restrictions. This is consistent with national policy that energy resources should be available for development and with the principle of multiple-use management of the public lands. Availability of lands for oil and gas leasing does not mean that other resource values would not receive full consideration; such resources and values would be adequately protected by the restrictions described above.

Other Leasable Minerals

The objective for management of other leasable minerals is to provide for leasing, exploration, and development of oil shale, geothermal resources, and nonenergy leasable minerals while protecting other resource values.

Under the proposed plan, the planning area would be open to leasing of oil shale, geothermal resources, and nonenergy leasable minerals. Lease applications would be considered case by case. Stipulations to protect important surface values would be based on interdisciplinary review of individual proposals and environmental analysis.

The rationale for selection of the management proposal for other leasable minerals is as follows: The proposed RMP would provide for leasing, exploration, and development of other leasable minerals where specific analysis showed such activity to be desirable. Other resource values would be protected through site-specific environmental analysis and, if leases were issued, through development of appropriate stipulations. Leases are issued at the discretion of the BLM.

Locatable Minerals

The objective for management of locatable minerals is to provide opportunities for locatable mineral claims and development while prohibiting such activities on lands not compatible with these types of activities.

Under the proposed plan, the planning area would be open to locatable mineral claims and development except for the withdrawals to be retained and the proposed new withdrawals shown in table 3. This includes 81,489 acres of existing withdrawals, 600 acres of C&MU Act classifications to be replaced by new withdrawals, and 940 acres of proposed new withdrawals, for a total of 83,029 acres of withdrawals. All other existing withdrawals would be revoked. Revocations could not be implemented until *National Wildlife Federation v. Burford et al.* is resolved. This court case is discussed on page 20 of the draft RMP/EIS. Withdrawals are shown on maps 21 and 22.

In 50,880 acres of ACECs described below, plans of operations would be required for locatable minerals activities that would cause surface disturbance (except casual use), regardless of the size of the disturbance.

> Raptor concentration areas other than Jep Canyon (27,500 acres); Como Bluff (1,760); Sand Hills (8,300); and Jep Canyon (13,320)

The rationale for selection of the management proposal for locatable minerals is as follows: The majority of existing mineral withdrawals were established for purposes that are no longer valid. For example, the coal classifications (671,768 acres) and the coal withdrawals (610,170 acres) were established to protect those minerals from entry before enactment of the Mineral Leasing Act of 1920. The Mineral Leasing Act accomplishes this protection, so the withdrawals no longer serve their intended purposes. In effect, they unnecessarily restrict other mineral activities.

The oil shale withdrawal (564,758 acres) was established to protect suspected oil shale deposits from location or leasing until the Geological Survey, U.S. Department of the Interior (GS) could ascertain their extent and value. (This duty was later handled by the Minerals Management Service.) The study was completed in 1982, and

TABLE 3

AREAS TO BE WITHDRAWN FROM LOCATABLE MINERAL ENTRY

	Acreage
Existing Withdrawals to be Retained	
Stratton hydrology study	2,694
Bureau of Reclamation withdrawals	73,290
Administrative site	6
Air navigation sites	440
R&PP (leases held)	1,144
Wildlife refuges (FWS)	3,915
TOTAL	**81,489**
C&MU Act Classifications to be Replaced by New Withdrawals	
Recreation sites as follows:	
Corral Creek	20
Teton Reservoir	160
Pryor Flats	40
Dugway	320
Nine Mile Hill	40
Shirley Mountains	20
TOTAL	**600**
Proposed New Withdrawals	
Recreation sites as follows:	
Bennett Peak	20
Big Creek	5
Encampment River	10
Prospect Creek	5
Jelm Mountain	10
Overland Trail sites	880[1]
Gibben's beardtongue site	10
TOTAL	**940**

ABBREVIATIONS: C&MU = Classification Multiple Use Act (see footnote 4 to table 1); FAA = Federal Aviation Administration; FWS = Fish and Wildlife Service, U.S. Department of the Interior; R&PP = Recreation and Public Purposes Act

[1] "Overland Trail sites" includes the Fort Washakie stage station. The two are listed separately in table 1, and the total acreage would appear to be greater, but the two sites overlap.

all the oil shale deposits in the Rawlins District were found to be of low grade and technically or financially unfeasible to develop. The MMS concluded its report with a recommendation that this oil shale withdrawal be revoked.

Individual review of withdrawals and classifications before revocation would ensure that only unnecessary withdrawals would be revoked under the proposed RMP. Locatable mineral claims would be allowed, which would be consistent with national policy and the principle of multiple-use management of the public lands. Retention of some existing withdrawals and establishment of new withdrawals would protect important areas containing unique resources that are rare in occurrence, are of national significance, or contain substantial public investments.

Salable Minerals

The objective for management of salable minerals is to provide mineral materials in convenient locations for users while protecting surface resources.

Under the proposed plan, mineral materials could be disposed of upon application or at the initiative of the district manager. Disposal would be approved or disapproved case by case. Stipulations to protect important resource values would be based on interdisciplinary review of individual proposals.

The rationale for selection of the management proposal for salable minerals is as follows: The sale of mineral materials would be carried out where specific analysis indicated it was appropriate. Site-specific environmental analysis and development of appropriate stipulations would protect other resource values when materials were sold. Mineral materials are sold at the discretion of BLM.

Recreation Management

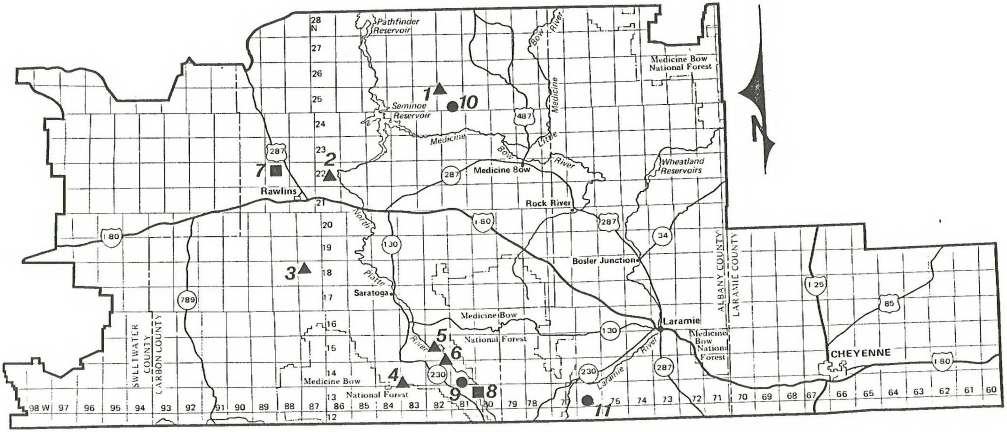
Objectives

The primary objective for recreation management is to ensure the continued availability of outdoor recreational opportunities sought by the public while other resources are protected. Other objectives are to meet legal requirements for the health and safety of visitors and to mitigate conflicts between different types of resource uses.

Recreation Areas and Sites

Existing Sites

Existing recreation sites to be managed are Bennett Peak, Corral Creek, Teton Reservoir, and Pryor Flat campgrounds, Dugway campground and boat launches, Encampment River campground and trailhead, and undeveloped sites at Nine Mile Hill and Big Creek. Existing activity plans for the Nine Mile Hill and Big Creek sites would be revised before implementation. The locations of existing and proposed recreation sites are shown on map 29.



▲ DEVELOPED RECREATION SITES

1 Pryor Flat
2 Dugway
3 Teton Reservoir

■ UNDEVELOPED RECREATION SITE

7 Nine Mile Hill
8 Big Creek

● PROPOSED RECREATION SITE

9 Prospect Creek
10 Shirley Mountains

New Sites

Priority for development of new recreation sites would be as follows: (1) a recreation site at Jelm Mountain, (2) a recreation site in the Shirley Mountains, and (3) a boat launch and a picnic area at Prospect Creek. Additional sites would be considered for development in the future as opportunities arose.

Special Recreation Management Areas

Special recreation management areas (SRMAs) would be developed at the areas described below. The locations of the proposed SRMAs are shown on map 30.

The *Continental Divide National Scenic Trail SRMA* covers 80 miles of trail through BLM-administered public land. The trail would be managed to provide opportunities for trail users to view the diverse topographic, geologic, vegetative, and scenic phenomena that characterize the Continental Divide and to observe examples of human use of the natural resources. The exact trail route would be identified through activity planning, which also would determine where easements or rights-of-way would be needed on private or state-owned land.

The 3,550-acre *North Platte River SRMA* would be managed to provide high-quality recreational opportunities, especially for boating, fishing, camping, and sightseeing. Management also would be aimed at providing facilities and continued public access. Surface-disturbing activities within ¼ mile on either side of the river would be restricted to maintain the quality of the visual resources.

The *Shirley Mountains Caves SRMA* (24,800 acres) would be managed to provide for protection and enjoyment of the cave system while other resource uses would be allowed aboveground (see map 31).

Off-Road Vehicle Management

Except for the areas and acreages described below, ORV use in the entire planning area would be limited to existing roads and trails. ORV designations are shown on map 32.

Sand Hills area (8,300 acres): ORV use would be limited to existing roads and trails, and rehabilitation or mitigation would be carried out in specific problem areas. (This area is discussed more fully under "Areas Considered for ACEC Designation" earlier in this chapter.)

Proposed Dune Ponds cooperative management area (3,240 acres): ORV use would be limited to open sand areas west of Carbon County Road 351 and to existing roads and trails in the rest of the area. Rehabilitation or mitigation would be carried out in specific problem areas (see map 33).

West Seminoe area (99,162 acres): ORV use would be limited to designated roads and trails to help resolve resource conflicts and preserve public access.

The BLM would coordinate with interested individuals, organizations, and agencies in preparing plans for implementation of ORV designations. The cooperation of owners of adjacent property also will be essential for successful implementation of these designations.

Recreational Needs to Be Considered

Access to Recreation Areas

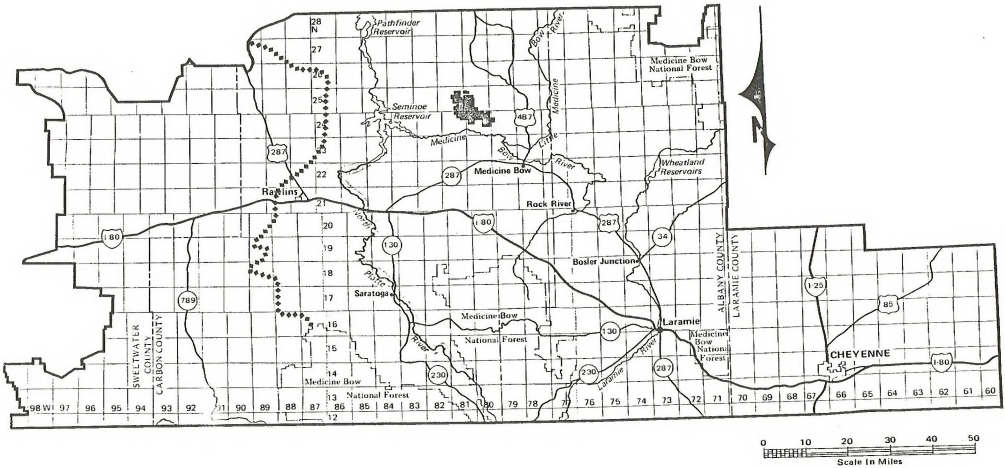
The BLM would pursue opportunities to acquire or maintain legal access to the following areas to ensure continued availability of outdoor recreational opportunities for the public. The areas are listed by level of importance: High—Atlantic Rim, Big Creek, Ferris Mountains, Miller Hill, Shirley Mountains; moderate—Rawlins Uplift, Seminoe-Pathfinder; and low—Continental Divide Trail.

Consolidation of Landownership

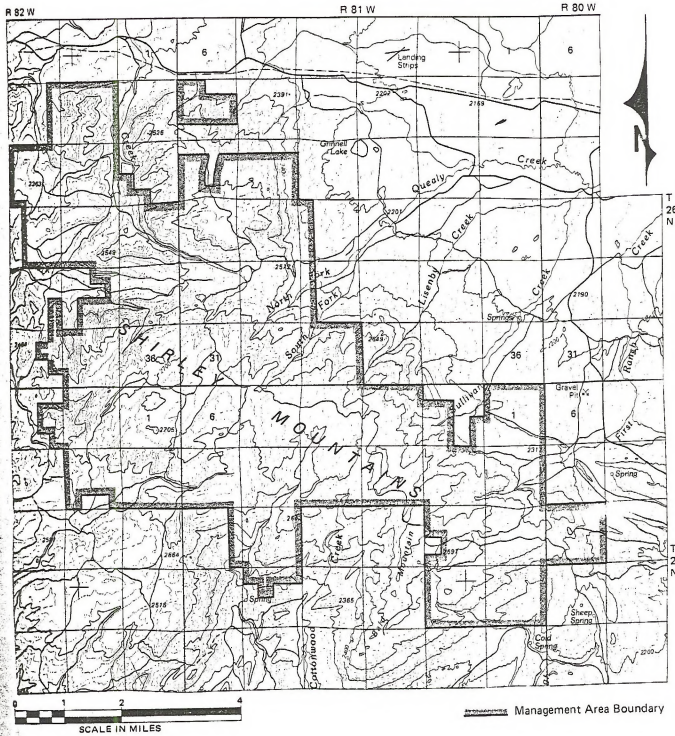
Consolidation of landownership in the following areas would be considered to increase recreational opportunities for the public. The areas are listed by priority ranking: High—Bennett Peak, Dugway, Miracle Mile, North Platte River area; moderate—Dune Ponds, Elk Mountain, Shirley Mountains caves; and low—Bennett Mountains, Encampment River Canyon, Ferris Mountains.

Rationale

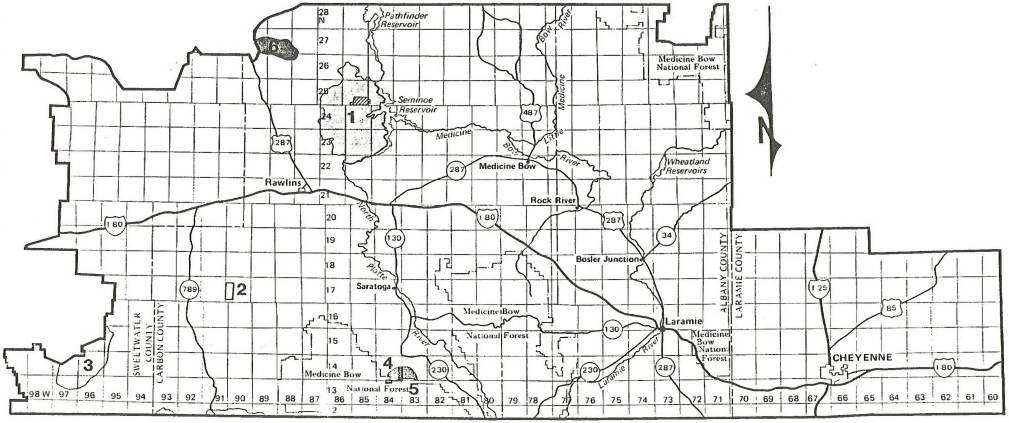
The rationale for selection of the management proposal for recreation is as follows: Under the proposed RMP, existing recreation sites would continue to be managed for public use, and development of proposed new recreation sites would respond to demand for such facilities. Designation of SRMAs would focus management emphasis in areas with unique or significant recreation values. The proposed ORV designations would allow for continued recreational ORV use while protecting other resource values.



Map 30
SPECIAL RECREATION MANAGEMENT AREAS



Map 31
SHIRLEY MOUNTAINS CAVES
SPECIAL RECREATION MANAGEMENT AREA
(Draft Map 29)
Medicine Bow-Divide Resource Management Plan



ORV Travel Limited to Open Sand Areas West of the Highway and Existing Roads and Trails

ORV Travel Limited to Designated Roads and Trails

Closed to ORVs from Dec. 1 - April 30

Closed to All Vehicles Yearlong

ORV Travel Limited to Existing Roads and Trails

1 West Seminoe and Dune Ponds

2 Sand Hills

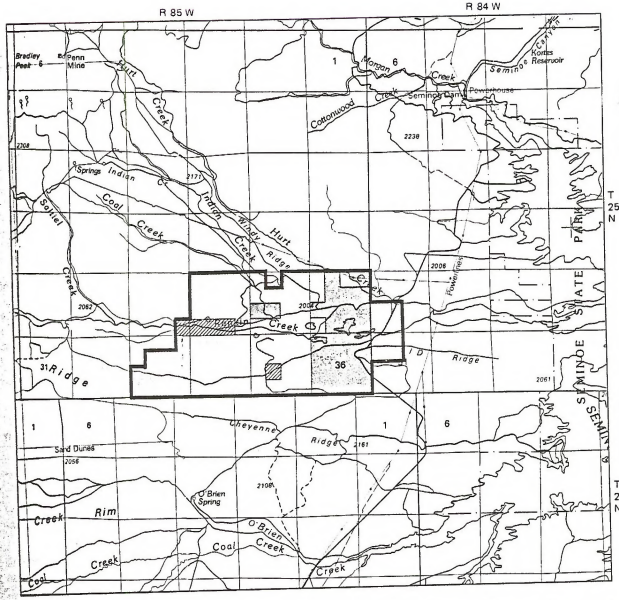
3 Adobe Town
(See Adobe Town-Ferris Mtns. Wilderness EIS)

4 Encampment River Canyon
(See Medicine Bow Wilderness EIS)

5 Encampment River Trail
(See Medicine Bow Wilderness EIS)

0 10 20 30 40 50
Scale In Miles

Map 32
OFF-ROAD VEHICLE DESIGNATIONS
(Revised From Draft Map 16)



Map 33
DUNE PONDS PROPOSED
COOPERATIVE MANAGEMENT AREA
Medicine Bow-Divide Resource Management Plan

In the West Seminoe area, limitation of ORV use to designated roads and trails would help to eliminate resource conflicts and preserve public access into the area through private lands. Landownership in that area is mixed; therefore, much of the recreation in the area occurs on private or state-owned lands. Private landowners have experienced problems with vandalism and disregard for private property associated with ORV-based recreation. Resource damage has been noted on public lands in the area. Through designation of roads and trails, ORV use could be directed away from problem areas. Specifics of this designation and the method of implementation would be formulated through coordination with the Wyoming Land Commission, the Wyoming Game and Fish Department, private landowners, the Wyoming Wildlife Federation, organizations of sports enthusiasts, and other interested parties.

Acquisition of access and consolidation of landownership in specific areas would improve opportunities for the public to engage in recreational activities without concern about access requirements on lands under different ownerships.

Soils, Water, and Air

The objectives for management of soils, water, and air are as follows:

To prevent the deterioration of air quality beyond applicable local, state, or federal standards and to enhance air resources of high quality where practicable.

To preserve scenic values that could be impaired by the release of total suspended particulates or other air contaminants into the air

To maintain soil cover and productivity where they are adequate and to increase soil cover and productivity where they are in a downward trend

To maintain riparian areas in good or excellent condition and to improve areas that are being degraded

To control flood and sediment damage from natural or human-induced causes

To reduce salt loading in watersheds that lie within the Colorado River Basin

To meet or exceed established standards for quality of surface water and groundwater where water quality has been degraded by human-induced causes

To provide for physical and legal availability of water for use by the public and by federal, state, and local agencies for fisheries and wildlife and for livestock, recreational, municipal, and industrial uses.

Under the proposed plan, the BLM would implement intensive land-use practices to mitigate salt and sediment loading caused by surface-disturbing activities. These practices would be carried out in the following areas, which are listed in priority order: (1) Muddy Creek, (2) Sage Creek, (3) and Second and Third Sand creeks. A watershed plans would be prepared and implemented for each area, and the effectiveness would be monitored. As a fourth priority, intensive management practices and monitoring also would be implemented in the Little Snake River Basin (excluding the Muddy Creek watershed) as watershed problems were identified. These critical watersheds are shown on map 34. Other watersheds could be added if problems occurred.

In other areas, the BLM would carry out standard watershed management practices designed to meet soils, water, and air objectives. These practices would be included in activity plans such as AMPs and HMPs.

Surface-disturbing activities would be prohibited on unstable areas unless it could be demonstrated that the instability could be overcome. Specific unstable areas such as landslides, slumps, and areas exhibiting soil creep would be identified individually. Unstable areas are known to occur within the lands identified on map 35.

The rationale for selection of the management proposal for soils, water, and air is as follows: The objectives for soils, water, and air would be achieved largely through actions described for management actions of various programs, as detailed below.

ACECs—intensive management of surface-disturbing activities

Fire management—compliance with Wyoming and national air quality and visibility standards

Forests—maintenance of healthy forest vegetation

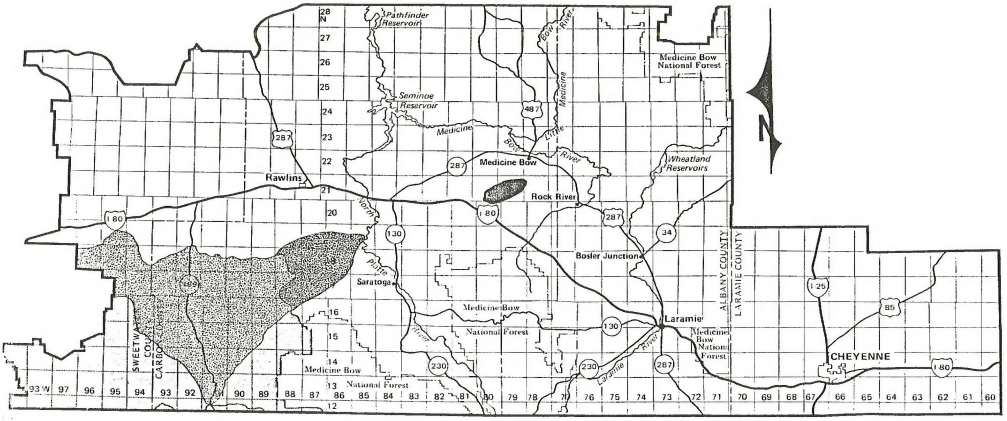
Lands—management of the location of utility/transportation systems; protective withdrawals

Livestock grazing—improvement of ecological condition, forage production, and riparian vegetation condition

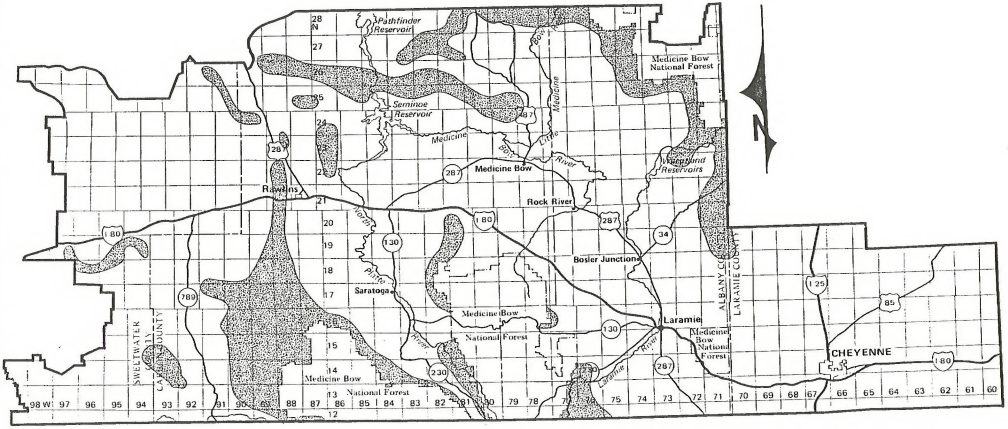
Minerals—development of appropriate mitigation; application of surface protection requirements

Wildlife habitat—vegetation manipulation

Potential effects on soils, water, or air resources from various actions would be mitigated by development of appropriate stipulations during site-specific analysis of individual proposals. Intensive land-use management practices in the critical watersheds would help to reduce salt loading in the Colorado River Basin, enhance soil cover, improve riparian conditions, control flood and sediment damage, and improve water quality.



Map 34
CRITICAL WATERSHEDS
(Draft Map 37)
Medicine Bow-Divide Resource Management Plan



Map 35
UNSTABLE SLOPE AREAS ON PUBLIC LANDS
(Draft Map 32)

Vegetation Management

Forests, Rangeland, and Riparian Areas

Most management actions that would affect forest, rangeland, and riparian vegetation are described in the sections of this document for management of fire; forests; livestock grazing; recreation; soils, water, and air; and wildlife habitat and fisheries.

Rare Plants

The objective for management of three known rare plant populations is to maintain or enhance each of those populations. (More detailed information on rare plants is presented on page 176 of the draft RMP/EIS.)

As described earlier in this chapter in the section on areas considered for ACEC designation, the known population of Gibben's beardtongue (*Penstemon gibbensii*) in the southwest part of the planning area would be protected from disturbance by maintenance of existing fencing around the population. Established trend studies would be continued, and the area would be withdrawn from mineral location.

The planning area contains fifteen known populations of persistent sepal yellowcress (*Rorippa calycina*), which has been proposed for threatened or endangered status. Some of this is on land administered by the Bureau of Reclamation; therefore, the BLM would coordinate with that agency to monitor populations of persistent sepal yellowcress. In addition, the BLM would coordinate with county weed and pest control districts to ensure that populations of the plant would not be affected by weed control programs.

The BLM would coordinate monitoring of the Muddy Gap cushion plant community with The Nature Conservancy. If monitoring indicated a need, additional protective measures would be taken as necessary to protect the community. For more detail, see the section on areas considered for ACEC designation earlier in this chapter. These plant populations are described in greater detail on page 176 of the draft document, where scientific names also are listed.

The rationale for selection of the management proposal for rare plants is as follows: Actions planned in the proposed RMP would meet the objective of maintaining or enhancing the three types of rare plants without unnecessarily restricting other resource management activities. If monitoring should indicate a need for more stringent measures, they could be implemented when necessary.

Visual Resource Management

The objective for management of visual resources is to minimize adverse effects on visual resources while maintaining the effectiveness of land-use allocations.

Under the proposed plan, the planning area would be managed according to visual resource management (VRM) classes as follows: Class I, 33,165 acres; Class II, 160,640 acres; Class III, 3,582,195 acres; Class IV, 224,000 acres. The distribution of these VRM classes is shown on map 36. VRM classes are explained on pages 179 and 180 of the draft RMP/EIS.

The rationale for selection of the proposal for visual resource management is as follows: The restrictions or modification of proposed management actions that would be carried out under the proposed plan would ensure that visual quality would be maintained in accordance with the assigned management classes.

Wild Horse Management

The objective for management of wild horses is to protect, maintain, and control a viable, healthy herd of wild horses while retaining their free-roaming nature and to provide adequate habitat for free-roaming wild horses by management consistent with environmental protection and enhancement policies.

Under the proposed plan, wild horses would be managed to meet the population objectives in existing activity plans for wild horse herd management areas (HMAs) as follows:

Adobe Town HMA—minimum 300, maximum 500
Flat Top HMA—minimum 40, maximum 100
Seven Lakes HMA (portion within the planning area)—minimum 66, maximum 135

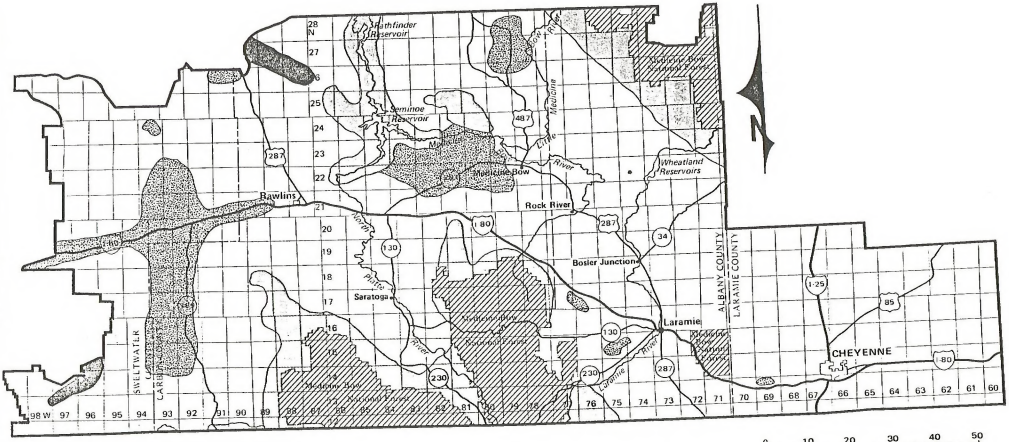
Wild horse HMAs are shown on map 37.

The rationale for selection of the management proposal for wild horse management is as follows: Actions planned in the proposed RMP would meet the objectives of maintaining a viable herd, retaining their free-roaming nature, and keeping management consistent with environmental policies.

Wildlife Habitat and Fisheries Management

Introduction

The 29 standard habitat types in the Great Divide Resource Area have been ranked by man-



Class I

Class II

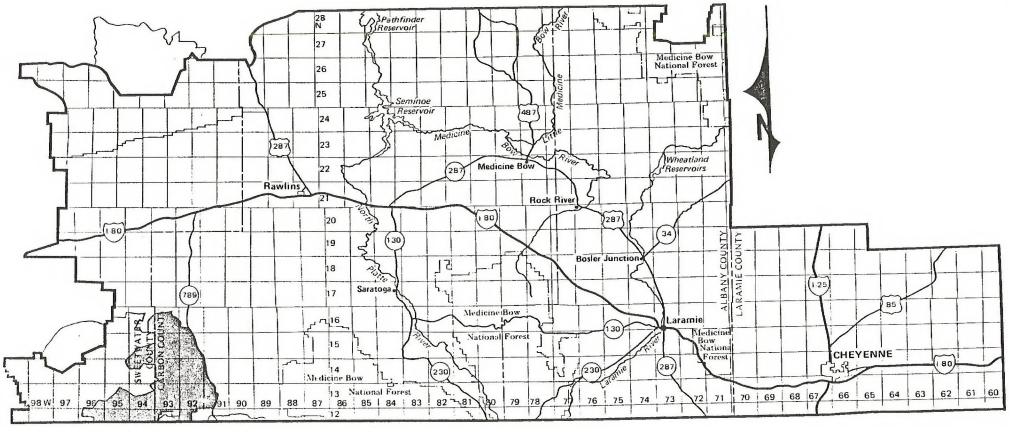
Class III

Map 36
VISUAL RESOURCE MANAGEMENT CLASSES

Class III

Class IV

VISUAL RESOURCE MANAGEMENT
(Draft Map 43)
Medicine Bow-Divide Resource Management Plan



0 10 20 30 40 50
Scale In Miles

Seven Lakes Wild Horse Herd Management Area

Adobe Town Wild Horse Herd Management Area

Flat Top Wild Horse Herd Management Area

Map 37
WILD HORSE HERD MANAGEMENT AREAS
(Draft Map 44)
Medicine Bow-Divide Resource Management Plan

agement priority into three categories. High priority habitat types, which usually support a large number of wildlife species, are not common in the planning area. Sound management is required to ensure maintenance or improvement of the vegetative composition and structure of moderate priority habitat types, which usually are of lesser importance to wildlife but are in greater supply than high priority types. In low priority habitat types, there is less vegetative diversity. Because of their abundance and lower wildlife value, these types can be more heavily used by conflicting resources without significant wildlife impacts resulting.

Objectives

The objectives for management of wildlife habitat and fisheries are as follows:

To provide habitat quality (food, cover, space, and water) adequate to support a natural diversity of wildlife and fisheries, including big game, upland game, waterfowl, nongame species, game fish, sensitive, threatened, and endangered species, species of special management in Wyoming, and featured species of federal interest

To comply with mandates of the Endangered Species Act so as to assist in recovery of threatened or endangered species and species of special management in Wyoming, as well as to assist in meeting goals of recovery plans

In high priority standard habitat sites and fisheries areas, to maintain or improve vegetation condition and/or to avoid long-term disturbance

In moderate and low priority standard habitat sites, to maintain or improve overall ecological quality, thus providing good wildlife habitat within the constraints of multiple-use management

High, moderate, and low priority standard habitat sites are listed in table 4.

TABLE 4

RANKING OF STANDARD HABITAT TYPES

High Priority[1]	Moderate Priority[1]	Low Priority[1]
Open aquatic	Greasewood-sagebrush riparian	Short grasslands
Riparian grassland	Big sagebrush-rabbitbrush	Saltbush steppe
Willow-waterbirch riparian	Bitterbrush	Greasewood
Aspen riparian	Sagebrush-mixed grass	Badland
Cottonwood riparian	Silver sagebrush steppe	True sand dunes
Mountain shrub	Lodgepole pine	Upland meadows
Utah juniper	Limber pine	
Quaking aspen	Early successional conifer	
Aspen conifer	Rockland	
Ponderosa pine/Douglas-fir	Saline subirrigated grassland	
Platte Valley rockland		
Laramie Peak rockland		
Wet forested meadow		

NOTE: Ranking is based on the wildlife communities (total species, number of breeders, number of rare species) combined with the availability of each type.

[1] High-priority habitats are those that require intensive management actions (data collection, enhancement, protection) to maintain their productivity as diverse wildlife communities; moderate-priority habitats are those that require less intensive management to maintain their productivity as wildlife communities; low-priority habitats are those that can be more heavily used by conflicting resources so that the higher priority wildlife habitats can be maintained.

Habitat Management Actions

Cooperative Management Areas and HMP Areas

Under the proposed plan, there would be 16 habitat management areas, as follows:

Six existing HMP areas: Baggs, Encampment/Bighorn Sheep, Ferris/Seminoe, Red Desert, Sage Creek, and Shirley Mountains

Five new HMP areas (of which one would be an addition to an existing area): Jelm Mountain, Laramie Peak, Sage Creek addition, Saratoga Valley, and South Desert

Five existing cooperative management agreement areas: Laramie Peak game winter range, Pennock Mountain elk winter range, Sybille winter deer pasture, Wick elk winter area, and Chain Lakes. (The Chain Lakes cooperative management area was inadvertently omitted from table 7.) High priority species for this area are antelope and waterfowl.)

One new cooperative management agreement area: Dune Ponds

The existing and proposed HMP areas are shown on map 38, the existing and proposed cooperative management agreement areas on map 39.

Table 5 shows site-specific management actions that would be implemented in HMP areas and cooperative management areas under the proposed plan to improve wildlife habitat. (This includes the use of fire as a management tool.) Table 6 lists wildlife inventories and monitoring that would be carried out in those areas under the proposed plan. The estimated areas that would be involved in the actions listed in these two tables are as follows: 60 miles of streams (fisheries); 545 acres of reservoirs; 271,000 acres of raptor habitat; 243,000 acres of high priority habitat (including wetlands and riparian zones); and crucial winter range for big game species as follows: antelope, 375,000 acres; bighorn sheep, 23,000 acres; deer, 288,000 acres; elk, 153,000 acres.

Table 7 shows management priority by wildlife species for each existing HMP area or cooperative agreement area. Table 8 shows the same information for proposed HMP and cooperative agreement areas.

Other Areas Important to Wildlife

Wildlife can be protected by several types of measures. Spatial and temporal management of development, facilities, and uses can minimize disturbance of wildlife in areas of special importance during critical periods (for example, seasonal restrictions would be applied when necessary to activities in sage grouse strutting grounds or sharp-tailed grouse dancing grounds during breeding and nesting periods). When considering application of such protective measures, the BLM would consult with the WGFD concerning proposals involving surface disturbance in these areas and cooperate with owners of adjacent property to manage these habitats.

The application of the Wyoming BLM standard mitigation guidelines for surface-disturbing activities would be used to protect many types of areas of importance to wildlife, including areas described in the following paragraphs. In addition, other special management practices would be used as appropriate to focus management emphasis on important resources or to minimize potential conflicts.

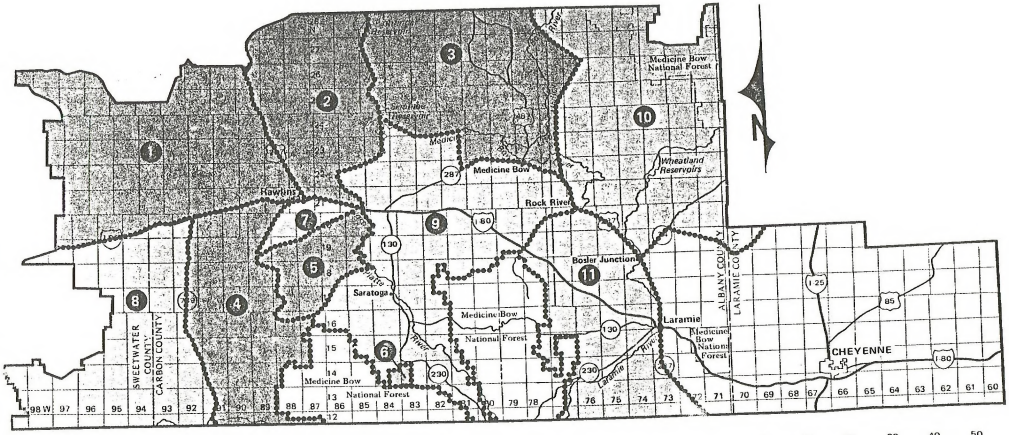
The resources in the 79,000-acre Baggs Elk Crucial Winter Range would be managed in a manner that would maintain the integrity of the crucial winter habitat for elk and allow for development of coal and oil and gas. The BLM would seek the cooperation of owners of adjacent property to manage this habitat, as mentioned in the section on areas considered for ACEC designation. In addition, surface-disturbing activities would be intensively managed to maintain habitat quality. This would entail case-by-case examination of proposals to determine potential adverse effects and appropriate actions to mitigate those effects.

Crucial winter ranges for other big game species would be protected by the application of the Wyoming BLM standard mitigation guidelines for surface-disturbing activities. In addition, surface disturbance would be mitigated to restore and/or replace lost habitat.

In areas where crucial winter ranges for more than one species of big game overlap (approximately 122,880 acres of public land), habitat quality would be maintained through application of the Wyoming standard mitigation guidelines for surface-disturbing activities (see map 40). In addition, the BLM would employ spatial and temporal management of development, facilities, and users to avoid activity during certain times of the year and in certain areas. The BLM would cooperate with owners of adjacent property to manage these overlapping winter ranges and would consult with the WGFD concerning proposals involving surface disturbance in these areas.

Sage grouse and sharp-tailed grouse strutting/dancing grounds and nesting habitat would be protected by the application of the Wyoming BLM standard mitigation guidelines for surface-disturbing activities.

In raptor concentration areas (117,560 acres), the BLM would manage resources to maintain the productivity of nesting raptor pairs and to allow for development of coal and oil and gas. In addition, the BLM would seek the cooperation of



Existing HMP Areas

Red Desert

Ferris/Seminoe

Shirley Mountains

Baggs

Encampment Bighorn Sheep

Proposed HMP Areas

Sage Creek Addition

South Desert

Saratoga Valley

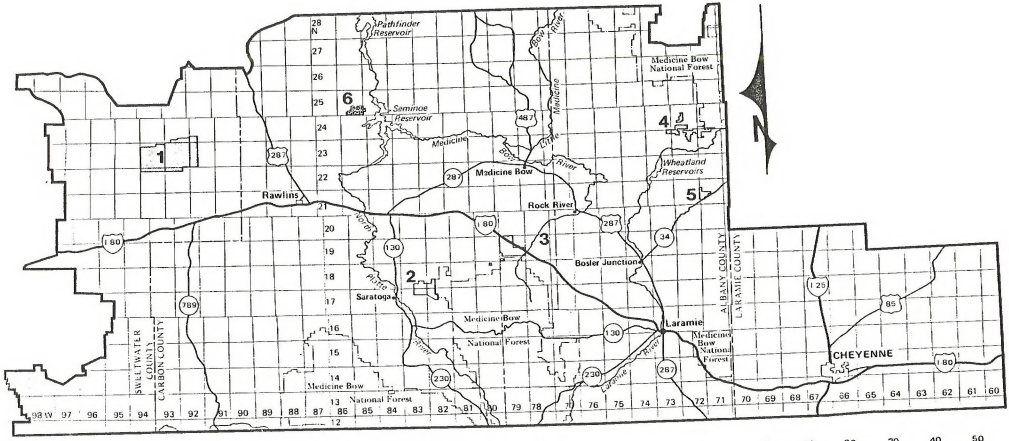
Jelm Mountain

No HMP Areas

Map 38

EXISTING AND PROPOSED HABITAT MANAGEMENT PLAN AREAS

(Revised From Draft Map 38)



Existing Cooperative Agreement Management Areas

Proposed Cooperative Agreement Management Areas

1 Chain Lakes

2 Pennock Mountain Elk Winter Range

3 Wick Bros. Elk Winter Area

4 Laramie Peak Game Winter Range

5 Sybille Winter Deer Pasture

6 Dune Ponds

Map 39
COOPERATIVE AGREEMENT HABITAT MANAGEMENT AREAS
(Revised From Draft Map 45)
Medicine Bow-Divide Resource Management Plan

TABLE 5

WILDLIFE HABITAT IMPROVEMENT ACTIONS BY HMP AREA

Management Action	Present HMP Areas						Proposed HMP Areas				
	Baggs (387,000 acres)	Ferris-Seminoe (436,137 acres)	Shirley Mountains (460,730 acres)	Sage Creek Basin (145,267 acres)	Encampment Bighorn Sheep (8,250 acres)	Red Desert (1.1 million acres)	South Desert (670,000 acres)	Saratoga Valley (462,600 acres)	Laramie Peaks (228,000 acres)	Jelm Mountain (78,700 acres)	Sage Creek Basin Addition (34,050 acres)[1]
In-stream structures (fisheries)	11 mi.	1 mi.	2 mi.	2 mi.	NP	NP	NP	X	X	NP	X
Aquatic wetland improvement (plantings)	100 ac.	NP	10 ac.	80 ac.	NP	50 ac.	X	X	X	NP	X
ORV limitation mule deer CWR[2]	8,300 ac.	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
ORV seasonal closure—Bighorn Sheep CWR	NP	NP	NP	NP	6,700 ac.	NP	NP	NP	NP	NP	NP
Grazing exclosure fisheries—Colorado River cutthroat trout and other species	2	NP	NP	NP	NP	NP	NP	X	NP	NP	X
Riparian improvement fencing	80 ac.	63 ac.	20 ac.	218 ac.	NP	50 ac.	X	X	X	X	X
Waterfowl nesting structures (number)	5	4	4	5	NP	X	X	X	X	NP	X
Reservoir development waterfowl (number)	28	X	3	X	NP	10	X	X	X	X	X
Prescribed burns habitat diversity	18,500 ac.	X	NP	NP	X	NP	X	X	X	X	NP
Fencing—CWR[2] grazing management	8 mi.	1 mi.	NP	NP	NP	NP	NP	X	X	X	NP
Aspen regeneration management	500 ac.	X	NP	NP	X	NP	NP	X	NP	X	X
Reservoir air pump/windmill—fisheries and waterfowl (number)	NP	1	2	NP	NP	NP	NP	NP	NP	NP	X

TABLE 5 (Continued)

WILDLIFE HABITAT IMPROVEMENT ACTIONS BY HMP AREA

Management Action	Present HMP Areas						Proposed HMP Areas				
	Baggs (387,000 acres)	Ferris-Seminoe (436,137 acres)	Shirley Mountains (460,730 acres)	Sage Creek Basin (145,267 acres)	Encampment Bighorn Sheep (8,250 acres)	Red Desert (1.1 million acres)	South Desert (670,000 acres)	Saratoga Valley (462,600 acres)	Laramie Peaks (228,000 acres)	Jelm Mountain (78,700 acres)	Sage Creek Basin Addition (34,050 acres)[1]
Reservoir development fisheries (number)	X	X	X	NP	NP	X	NP	X	NP	NP	X
Erosion control (fisheries)	NP	NP	1/4 mi.	NP	NP	NP	NP	NP	NP	NP	X
In-stream structures (riparian improvement)	100 mi.	NP	NP	NP	NP	5 mi.	X	X	X	X	X
Plantings (riparian improvement)	80 ac.	18 ac.	NP	X	NP	50 ac.	X	X	X	X	X
Vegetation chaining to reju venate high priority habitat	X	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Road closures	NP	NP	2-4 mi.	NP	NP	NP	NP	X	NP	NP	NP
Fence modifications	NP	X	NP	NP	NP	10 mi.	X	X	X	X	X
Shrub plantings	NP	NP	10 ac.	NP	NP	10 ac.	X	X	NP	X	X
Reservoir development fisheries (number)	NP	NP	1	X	NP	NP	NP	X	NP	NP	X
Digitize habitat types	X	X	X	X	X	500,000 ac.	X	X	X	X	X
Computerize wildlife values for computer generated maps for rapid information retrieval	387,000 ac.	X	X	X	X	1,000,000 ac.	X	X	X	X	X

NOTE: X = planned, but specific quantities not determined; NP = none planned.

[1] See map 38.

[2] Crucial winter range.

TABLE 6

WILDLIFE HABITAT INVENTORIES AND MONITORING BY HMP AREA
(in acres unless otherwise noted)

	Present HMP Areas						Proposed HMP Areas				
Type of Action	Baggs	Ferris-Seminoe	Shirley Mountains	Sage Creek Basin	Encampment Bighorn Sheep	Red Desert	South Desert	Saratoga Valley	Laramie Peaks	Jelm Mountain	Sage Creek Basin Addition[1]
Inventories											
Raptors	12,000	10,000	NP	NP	NP	600,000	X	X	X	X	X
Prairie dog towns	50,000	500 acres/yr	50,000	NP	NP	600,000	X	X	X	X	X
Sage grouse/sharp-tailed grouse	80,000	X	NP	NP	NP	1,000,000	X	X	X	X	X
Sandhill crane	3,000	NP	NP	NP	NP	NP	NP	X	NP	NP	NP
Big Game CWR[2]											
Antelope	NP	X	15,000	NP	NP	NP	X	X	NP	NP	NP
Mule deer	NP	X	X	NP	NP	NP	X	X	X	X	X
Elk	NP	X	X	NP	NP	50,000	NP	X	X	X	NP
Bighorn sheep	NP	X	PH	NP	X	NP	NP	X	X	NP	NP
Aspen sites	NP	X	NP	NP	NP	NP	NP	NP	NP	NP	X
High priority habitats	NP	NP	16,000 acres/yr	NP	NP	NP	X	X	X	X	X
Riparian	1,000	NP	NP	X	NP	NP	X	X	X	X	X
Trout stream	NP	NP	X	X	NP	10,000	NP	X	X	NP	NP
Waterfowl	X	X	X	X	NP	600,000	X	NP	X	X	NP
Monitoring[3]											
Raptors	75,000	NP	X	X	NP	1,000,000	X	NP	NP	X	X
Sage grouse/sharp-tailed grouse	45,000	NP	X	NP	NP	500,000	X	NP	NP	NP	NP
Big Game CWR[2]											
Antelope	53,000	X	NP	NP	NP	NP	X	NP	NP	X	X
Mule deer	74,000	X	X	NP	X	50,000	NP	X	X	X	NP
Elk	120,000	NP	X	NP	X	NP	NP	X	X	X	NP
Bighorn sheep	NP	NP	NP	NP	X	NP	NP	NP	NP	NP	NP
Bald eagle roosts	25 mi	NP	NP	NP	NP	NP	NP	NP	NP	NP	X
Fisheries	X	X	NP	X	NP	NP	X	X	X	X	X
Riparian	1,000	X	X	X	NP	NP	X	X	X	X	X
High priority habitat	18,000	X	X	NP	NP	10,000	NP	NP	NP	NP	X
Waterfowl	NP	NP	NP	NP	NP						

TABLE 6 (Continued)

WILDLIFE HABITAT INVENTORIES AND MONITORING BY HMP AREA
(in acres unless otherwise noted)

	Present HMP Areas						Proposed HMP Areas				
Type of Action	Baggs	Ferris-Seminoe	Shirley Mountains	Sage Creek Basin	Encampment Bighorn Sheep	Red Desert	South Desert	Saratoga Valley	Laramie Peaks	Jelm Mountain	Sage Creek Basin Addition[1]
Studies											
Raptors (oil & gas impacts and mitigation)	29,400	22,240	NP	8,000	NP	17,280	15,770	5,440	NP	NP	NP
Food habits/ competition	NP	NP	NP	NP	X	NP	NP	X	NP	NP	NP

NOTE: X = planned, but specific quantities not determined; NP = none planned; PH = potential habitat

[1] See map 38.

[2] Crucial winter range.

[3] Wildlife population status, habitat conditions, and trend would be monitored to measure progress toward HMP objectives. The quantity and intensity of monitoring will depend on funding and personnel.

TABLE 7

MANAGEMENT PRIORITY BY SPECIES AND HMP AREA OR COOPERATIVE AGREEMENT AREA

	HMP Areas						Cooperative Agreement Areas			
Species	Baggs	Ferris-Seminoe	Shirley Mountain	Sage Creek Basin	Encampment Bighorn Sheep	Red Desert	Wick Elk Winter Area	Pennock Mountain Elk Winter Range	Laramie Peak Game Winter Range	Sybille Winter Deer Pasture
Elk	HP	HP	HP	—	HP	—	HP	HP	P	P
Mule deer	P	P	HP	P	HP	P	P	P	HP	HP
Antelope	P	P	HP	—	—	P	—	—	P	P
Bighorn sheep	—	HP	—	—	HP	—	—	—	HP	—
Raptors	HP	HP	—	HP	—	HP	—	—	—	—
Colorado River cutthroat trout	HP	—	—	—	—	—	—	—	—	—
Waterfowl	P	P	P	P	—	HP	—	—	—	—
Bald eagles	HP	HP	HP	—	—	—	—	—	HP	—
Peregrine falcon	—	P	—	—	—	—	—	—	—	—
Black-footed ferret	HP	HP	HP	HP	—	P	—	—	—	—

NOTE: HP = high priority species for this management area; P = priority species for this management area.

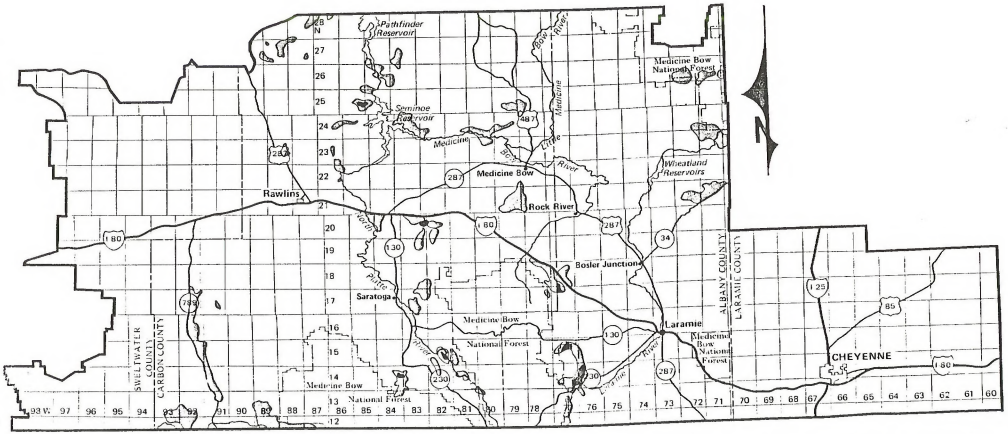
TABLE 8

MANAGEMENT PRIORITY BY SPECIES FOR PROPOSED ADDITIONAL HMP AREAS

Species	South Desert	Saratoga Valley	Laramie Peak	Jelm Mountain	Sage Creek Addition[1]
Elk	—	HP	HP	HP	—
Mule deer	HP	HP	HP	HP	HP
Antelope	HP	P	P	P	HP
Bighorn sheep	—	HP	HP	—	—
Raptors	HP	HP	—	—	P
Waterfowl	P	P	P	P	—
Bald eagles		HP	HP	—	—
Black-footed ferret	HP	HP	P	—	—
Fisheries	—	HP	P	P	HP

NOTE: HP = high priority species for this management area; P = priority species for this management area

[1] See map 38.



Overlapping Crucial Winter Ranges (3 species)

Overlapping Crucial Winter Ranges (2 species)

Map 40
OVERLAPPING CRUCIAL WINTER RANGES
Medicine Bow-Divide Resource Management Plan

owners of adjacent property to manage raptor nesting habitat (see the section on areas considered for ACEC designation).

Actions for Other Programs That Benefit Wildlife

Management actions proposed for other programs and those that would be implemented in some areas that were considered for ACEC designation also can benefit wildlife. For example, the 12-acre white pelican island would be managed to maintain and enhance nesting habitat for a colony of white pelicans, as described in the section on areas considered for ACEC designation.

Wildlife, as well as several other resources, would benefit from management actions in the Sand Hills area (8,300 acres), where management actions would protect the unique vegetation complex, maintain wildlife habitat values, minimize soil erosion, and promote recreational opportunities (see the section on areas considered for ACEC designation).

Livestock grazing management actions also can benefit wildlife habitat. For example, grazing management actions implemented under AMPs for "I" category allotments would incorporate actions to improve riparian habitat. Escape ramps would be installed in all watering troughs and bottomless tanks. When designing livestock water reservoirs and other such facilities, the BLM would consider whether these could also improve wildlife and fisheries habitat.

To benefit wildlife, the BLM would consider consolidating public land to obtain important wildlife habitat areas such as (a) perennial streams, lakes, and wetlands (USFWS also has identified this as a priority); (b) raptor concentration areas; (c) crucial winter range for bighorn sheep, elk, mule deer, or antelope; and (d) other high priority habitats.

In addition to the specific actions outlined above, some management actions that would benefit wildlife are described in this chapter under sections on the management of ACECs, fire, forests, livestock grazing, coal, oil and gas, locatable minerals, and recreation. Further information on how actions for other programs benefit wildlife is available in the Wildlife appendix in the draft RMP/EIS.

Rationale

The rationale for selection of the proposal for management of wildlife habitat and fisheries is as follows: Specific actions in the proposed RMP for habitat management in the 16 HMP areas would help to meet the objectives for wildlife habitat and fisheries management. Intensive management of surface-disturbing activities in these areas would help to ensure maintenance of habitat quality in areas of overlapping crucial winter range for more than one species of big game.

In addition, the objectives would be met largely through actions for management of other resources, including ACECs (intensive management of surface-disturbing activities), fire (use of prescribed fire), forests(maintenance of healthy forest vegetation), lands (management of location of utility/transportation systems; protective withdrawals), livestock grazing (improvement of ecological condition and riparian vegetation; improvement of forage production; exclusion of grazing from specific areas), minerals (appropriate mitigation of effects of development; application of the Wyoming BLM standard mitigation guidelines and intensive surface protection measures), and soils, water, and air (intensive management in critical watersheds).

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Threatened or Endangered Species **92**
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Chapter Three

Affected Environment

INTRODUCTION

Chapter 3 has not been rewritten for this final document; it contains only the necessary additions and corrections to the description of the affected environment presented in the draft RMP/EIS. Where a changed paragraph is reprinted, the changed portions appear in bold type. Entirely new sections are not in bold type, but the fact that they are new is clearly indicated. Some updated or corrected tables and maps have been included in this final RMP/EIS.

ADDITIONS AND CORRECTIONS TO SOIL, WATER, AND AIR RESOURCES

Water Resources

Surface Water

Quality

The first part of the section on "Quality" on page 140 should be corrected to read as follows: **Table 8 presents groundwater quality standards of the state of Wyoming. These standards also apply to surface waters.** (The "table 8" referred to appears on page 140 of the draft document.)

Following the sentence quoted above, a new section should be added, as follows:

The following standards also apply to surface waters. They are quoted from a publication of Wyoming Department of Environmental Quality, Water Quality Division, *Water Quality Rules and Regulations: Chapter VIII*,1980.

Turbidity

In all Class I and II waters, the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 10 NTUs [nephelometric turbidity units].

In all Class III waters, the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 15 NTUs.

An exception to the two paragraphs above in this section shall apply to the North Platte River from Guernsey Dam to the Nebraska line during the annual "siltrun" from Guernsey Dam.

Dissolved Oxygen

In all Class I and II waters, wastes attributable to or influenced by the activities of man shall not be present in amounts which will result in death or injury to existing aquatic life or which will result in a dissolved oxygen content of less than 6 mg/l [milligrams per liter] at any time.

In all Class III waters, wastes attributable to or influenced by the activities of man shall not be present in amounts which will result in injury or death to existing aquatic life or which will result in a dissolved oxygen content of less than 5 mg/l at any time.

Over spawning areas, wastes attributable to or influenced by the activities of man shall not be present in amounts which will cause reduction in the natural dissolved oxygen content, unless such reduction is the result of a thermal discharge allowed under the provisions contained in Section 25 of these regulations.

Settleable Solids

In all Wyoming surface waters, substances attributable to or influenced by the activities of man that will settle to form sludge, bank, or bottom deposits shall not be present in quantities which could result in significant aesthetic degradation, significant degradation of habitat for aquatic life, or adversely affect public water supplies, agricultural and industrial water use, plant life, or wildlife, etc.

Following the new section above, this paragraph (previously part of the first paragraph on page 140) should appear:

Table 9 shows where point source pollutants originate through state-permitted water discharges. Other permitted discharges in the planning area are not affecting water quality at present. (The "table 9" referred to appears on page 145 of the draft document and is not repeated here because there has been no change.)

The remainder of the "Water Resources" section of the draft document is unchanged.

Air Resources

Air Quality

The "Air Quality" section on page 154 of the draft RMP/EIS said that there are no Class I air quality areas in the planning area. We have learned that while there are no *federal* Class I air quality areas, the Savage Run Wilderness Area in the Medicine Bow National Forest classified as a Class I area by the state of Wyoming. The Wyoming DEQ enforces state Class I standards in the area as they apply to prevention of significant deterioration (PSD). The Savage Run Wilderness Area is managed by the Forest Service, U.S. Department of Agriculture (FS), but there may be implications for BLM management in the planning area, because management actions on BLM-administered public lands might affect air quality in the Class I area.

Table 11 on page 155 of the draft document listed the Wyoming and national ambient air quality standards. That table has been updated with information provided by the Air Quality Division, Wyoming Department of Environmental Quality (DEQ); the new version appears in this RMP/EIS as table 9.

ADDITIONS AND CORRECTIONS TO WILDLIFE AND FISHERIES

Wildlife

Big Game

Updated information on big game herd units has been received for table 24 on page 197 of the draft document. The updated table appears in this document as table 10. Table 11 of this document contains updated information on acreage important to wildlife species, replacing table 25 on page 200 in the draft document.

The maps showing herd unit area boundaries for elk, mule deer, and antelope (maps 47, 48, and 49 on pages 188, 189, and 190 in the draft RMP/EIS) have been updated and corrected. They appear in this document as maps 41 (antelope), 42 (elk), and 44 (mule deer). In addition, a new map showing moose herd unit area boundaries (map 43) is included in this document.

Maps showing crucial winter range for bighorn sheep and antelope (maps 50 and 54 on pages 191 and 195 of the draft RMP/EIS) have been updated and appear in this document as maps 45 and 46.

Elk

Several paragraphs in the sections about elk HMP areas should be changed as shown below. (The "Elk" section of the draft RMP/EIS begins on page 187 and continues on page 199 after several intervening pages of tables and maps.)

Ferris-Seminoe HMP Area. The Ferris-Seminoe HMP area provides summer, winter/yearlong, and crucial winter range for the Ferris elk herd, approximately **325 to 350** elk. **Riparian habitat and aspen/conifer stands are important for thermal and escape cover and calving habitat.** Migration from the seasonal ranges in the Ferris Mountains is generally to and from the crucial winter ranges north of the Ferris Mountains. Migrations from seasonal ranges in the vicinity of Bradley Peak (southeast of the Ferris Mountains) is generally to the crucial winter ranges southwest of the lower portions of Pathfinder Reservoir. **Crucial winter ranges are generally treeless, windblown ridges.**

Saratoga Valley HMP Area (Proposed). The Saratoga Valley proposed HMP area provides calving areas and summer, yearlong, and crucial winter range for approximately 4,230 elk, **as well as habitat for other big game species.** Maintenance **and enhancement of habitat for wintering elk and other big game species are primary objectives for this area.**

(The remainder of the section on Saratoga Valley under "Elk" is unchanged from the draft. This area is discussed further under the sections for bighorn sheep, deer, and antelope).

Laramie Peak HMP Area (Proposed). The Laramie Peak proposed HMP area provides summer, winter/yearlong, and crucial winter range for approximately 1,700 elk. Maintenance and **enhancement** of adequate forage and cover for wintering elk **and other big game species** is a primary wildlife objective for this area.

(The remainder of the section on Laramie Peak under "Elk" is unchanged from the draft. This area is discussed further under the sections for bighorn sheep, deer, and antelope).

The remainder of the "Elk" section of the "Big Game" discussion is unchanged.

Bighorn Sheep

The following new paragraph should be added on page 201, right column, following paragraph 5:

> The Laramie Peak proposed HMP area provides summer and crucial winter/yearlong habitat for approximately 300 to 350 bighorn sheep (see map 45). Improvement of bighorn sheep habitat through prescribed burning or timber harvest is a primary objective for this area. In a memorandum of understanding recently signed by the BLM, the WGFD, and the FS, certain public lands are identified as important areas for habitat manipulation for bighorn sheep. Those public lands are in the areas of Duck Creek/Split Rock, Sugarloaf Mountain, and Black Mountain.

The following new paragraph should be added to the section on bighorn sheep on page 202, left column, following paragraph 4:

TABLE 9

WYOMING AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Contaminants	Wyoming Standards (mcg/m³)	National Standards (mcg/m³)		Maximum Allowable Increments for Prevention of Significant Deterioration[8] (mcg/m³)		
		Primary	Secondary	Class I	Class II	Class III
Total Suspended Particulates						
24-Hour[1]	150.0	260.0	150.0	10	37	75
Annual[2]	60.0	75.0	60.0	5	19	37
Sulfur Dioxide						
3-Hour[1]	1,300.0	N/A	1,300.0	25	512	700
24-Hour[1]	260.0	65.0	N/A	5	91	182
Annual[3]	60.0	80.0	N/A	2	20	40
Nitrogen Dioxide						
Annual[3]	100.0	100.0	100.0	—	—	—
Carbon Monoxide						
1-Hour[1]	40,000.0	40,000.0	40,000.0	—	—	—
8-Hour[1]	10,000.0	10,000.0	10,000.0	—	—	—
Hydrogen Sulfide[4]						
0.5-Hour[5]	70.0	N/A	N/A	—	—	—
0.5-Hour[6]	40.0	N/A	N/A	—	—	—
Hydrogen Fluoride[4]						
12-Hour	3.0	N/A	N/A	—	—	—
24-Hour	1.8	N/A	N/A	—	—	—
7-Day	0.5	N/A	N/A	—	—	—
30-Day	0.4	N/A	N/A	—	—	—
Photochemical Oxidants (O_3)						
1-Hour[1]	160.0	235.0	235.0	—	—	—
Lead						
3-Month	1.5	1.5	1.5	—	—	—

SOURCE: U.S., Department of the Interior, Bureau of Land Management, and Department of Agriculture, Forest Service, *Draft Environmental Impact Statement on the Riley Ridge Natural Gas Project* (Denver, 1983), p. 4-40. Additional information provided by Air Quality Division, Wyoming Department of Environmental Quality.

NOTE: The Air Quality Division, Wyoming Department of Environmental Quality is in the process of adopting a new particulate standard, particulate matter 10 microns or less aerometric diameter (PM10). The annual a. rage standard is 50 mcg/m³; the 24-hour average standard is 150 mcg/m³. The ambient total particulate standards probably will be dropped.

Temporary construction-related emissions as well as the more permanent operations-related impacts are subject to national ambient air quality standards (NAAQS) and Wyoming ambient air quality standards (WAAQS). However, emissions resulting from emergency upsets and start-up and shut-down activities are exempted from NAAQS and WAAQS compliance.

[1] Not to be exceeded more than once per year.

[2] Annual geometric mean, never to be exceeded.

[3] Annual arithmetic mean, never to be exceeded.

[4] Wyoming ambient standard only.

[5] Not to be exceeded more than twice per year.

[6] Not to be exceeded more than twice in any five consecutive days.

[7] Wyoming ambient standard. Federal hydrocarbon standard was repealed by EPA.

[8] Incremental prevention of significant deterioration (PSD) standards are the maximum incremental amounts of pollutants allowed above the baseline in regions of clean air.

TABLE 10

BIG GAME HERD UNIT AREA DATA

Herd Unit Area Name and Number	WGFD Population Objective	Approximate Percentage of Population in Planning Area	Acreage of Crucial Habitat in Planning Area	Acreage of Crucial Habitat Potentially Affected[1]	HMPs in Herd Unit Area
Antelope					
Big Creek (No. 29)	600	100 (w) 10 (s)	640	0	Encampment Saratoga Valley
Centennial (No. 27)	6,000	100 (y)	6,400	5,000	Jelm Mountain
Chalk Bluffs (No. 20)	450	100 (y)		0	None
Cooper Lake (No. 26)	3,000	100 (y)	12,160	12,160	Jelm Mountain
Dwyer (No. 24)	2,500	5 (y)	0	0	Laramie Peak
Elk Mountain (No. 28)	5,000	100 (y)	26,520	25,000	Saratoga Valley
Hawk Springs (No. 21)	5 000	40 (y)	0	0	None
Iron Mountain (No. 23)	8,000	95 (y)	1,280	0	Laramie Peak
Medicine Bow (No. 25)	45,000	100 (y)	110,040	91,260	Shirley Mountain Laramie Peak Saratoga Valley
Iron Springs (No. 30)	12,000	100 (y)	0	0	Saratoga Valley Sage Creek Basin
North Ferris (No. 36)	5,000	80 (s) 40 (w)	24,960	0	Ferris-Seminoe
South Ferris (No. 37)	6,500	100 (y)	57,920	57,600	Ferris-Seminoe
Red Desert (No. 15)	10,000	85 (w) 60 (s)	57,600	96,700[2]	Red Desert
Baggs (No. 38)	7,200	100 (w) 90 (s)	53,120	50,200	Baggs
Bitter Creek (No. 14)	11,000	80 (w) 100 (s)	72,300	72,300	South Desert Baggs
Bates Hole (No. 44)	6,000	10 (w) 5 (s)	8,960	8,960	Shirley Mountain

TABLE 10 (Continued)

BIG GAME HERD UNIT AREA DATA

Herd Unit Area Name and Number	WGFD Population Objective	Approximate Percentage of Population in Planning Area	Acreage of Crucial Habitat in Planning Area	Acreage of Crucial Habitat Potentially Affected[1]	HMPs in Herd Unit Area
Bighorn Sheep					
Douglas Creek (No. 18)	350	75 (w) 50 (s)	3,060	2,360	Saratoga Valley
Encampment River (No. 21)	200	90 (w) 10 (s)	7,060	7,060	Encampment Saratoga Valley
Laramie Peak (No. 19)	600	60 (y)	11,520	0	Laramie Peak
Ferris (No. 17)	300	100 (y)	7,570	2,720	Ferris-Seminoe
Elk					
Iron Mountain (No. 31)	200	90 (y)	250 60 (elk calving)	0	Laramie Peak
Laramie Peak (No. 32)	2,300	50 (y)	15,400	0	Laramie Peak
Shirley Mountain (No. 34)	800	80 (y)	13,500	7,800	Shirley Mountain
Snowy Range (No. 33)	4,900	80 (w) 5 (s)	26,350 6,240 (elk calving)	12,725	Saratoga Valley Jelm Mountain Shirley Mountain
Baggs (No. 25)	4,200	90 (w) 10 (s)	83,670 2,560 (elk calving)	78,720 2,560 (elk calving)	Baggs Saratoga Encampment Sage Creek
Ferris (No. 39)	350	98 (y)	25,300	0	Ferris-Seminoe
Shamrock (No. 43)	75	100 (y)	0	0	Red Desert
Green Mountain[3] (No. 38)	450	0	0	0	Red Desert
Steamboat[3] (No. 26)	500	0	0	0	None

TABLE 10 (Continued)

BIG GAME HERD UNIT AREA DATA

Herd Unit Area Name and Number	WGFD Population Objective	Approximate Percentage of Population in Planning Area	Acreage of Crucial Habitat in Planning Area	Acreage of Crucial Habitat Potentially Affected[1]	HMPs in Herd Unit Area
Mule Deer					
Cheyenne (No. 34)	4,000	80 (y)	0	0	None
Iron Mountain (No. 38)	15,000	80 (y)	6,400	0	Laramie Peak
Laramie Peak (No. 37)	14,000	60 (y)	10,400	0	Laramie Peak
Platte Valley (No. 41)	20,000	90 (w) 50 (s)	59,730	24,860	Encampment Sage Creek Basin Saratoga Valley
Sheep Mountain (No. 39)	15,000	90 (w) 60 (s)	12,800	950	Jelm Mountain
Shirley Mountain (No. 40)	10,000	100 (y)	58,300	17,180	Shirley Mountain
Ferris (No. 47)	5,000	90 (y)	42,800	21,080	Ferris-Seminoe
Baggs (No. 27)	18,700	99 (w) 75 (s)	131,840	126,800	Baggs South Desert
Chain Lakes (No. 50)	200	100 (y)	0	0	Red Desert
Table Rock (No. 28)	450	40 (y)	0	0	Red Desert
Black Butte (No. 25)	1,750	5 (y)	0	0	South Desert
Bates Hole (No. 57)	12,000	5 (y)	7,770	7,700	Shirley Mountain
Sweetwater (No. 46)	5,000	1 (y)	0	0	Red Desert
White-tailed Deer					
Southeast Wyoming (No. 04)	3,000	1 (y)	0	0	Laramie Peak
Laramie River (No. 05)	1,000	5 (y)	0	0	Shirley Mountain Saratoga Valley Encampment Laramie Peak Jelm Mountain Sage Creek Basin

TABLE 10 (Continued)

BIG GAME HERD UNIT AREA DATA

Herd Unit Area Name and Number	WGFD Population Objective	Approximate Percentage of Population in Planning Area	Acreage of Crucial Habitat in Planning Area	Acreage of Crucial Habitat Potentially Affected[1]	HMPs in Herd Unit Area
Moose					
Snowy Range (No. 22)	100	10 (y)	0	0	Saratiga Valley Jelm Mountain Sage Creek Basin Baggs

NOTE: (s) = summer; (w) = winter; (y) = yearlong.

[1] Acreage listed is crucial habitat that has the potential to be significantly affected by one or more of the resource management alternatives analyzed in this document.

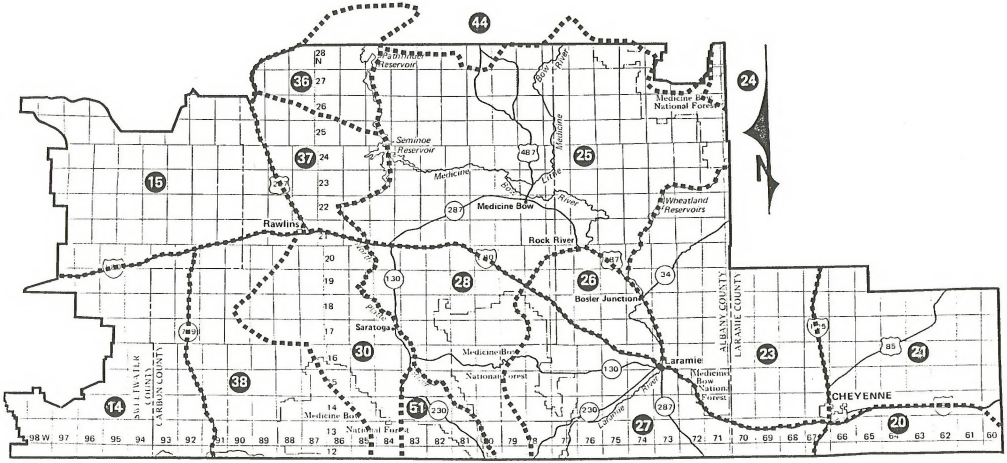
[2] Includes 50,000 acres of summer/yearlong habitat.

[3] Area 38 is in the planning area, but elk populations probably do not enter the planning area.

TABLE 11

ACREAGE OF HABITAT IMPORTANT TO WILDLIFE SPECIES IN THE PLANNING AREA BY HMP AREA

HMP Area	Elk Crucial Winter Range	Elk Calving Areas	Mule Deer Crucial Winter Range	Antelope Crucial Winter Range	Bighorn Sheep Crucial Winter Range	Sage/Sharp-tailed Grouse Areas (Number of Leks)	Raptor Concentration Areas
Baggs	78,720	2,560	74,240	50,120	—	139,100 (35)	38,660
Ferris-Seminoe	25,300	—	42,800	82,880	2,720	93,400 (15)	30,080
Shirley Mountain	13,500	—	66,400	83,800	—	105,000 (12)	—
Sage Creek Basin	—	—	3,100	—	—	22,680 (10)	8,640
Encampment Bighorn Sheep	4,950	—	5,800	—	7,060	—	—
Red Desert	—	—	—	57,600	—	195,000 (25)	17,280
South Desert	—	—	57,600	72,300	—	85,100 (16)	15,770
Saratoga Valley	21,150	3,360	49,300	54,600	3,060	195,300 (42)	5,440
Laramie Peak	15,400	—	10,400	7,100	11,520	49,700 (15)	—
Jelm Mountain	5,200	2,880	5,100	19,500	—	14,400 (3)	—
Other	250	60	15,300	1,000	—	2,900 (0)	1,690
Total	**164,470**	**8,860**	**330,040**	**428,900**	**24,360**	**902,280 (173)**	**117,560**



Herd Unit Area Boundary

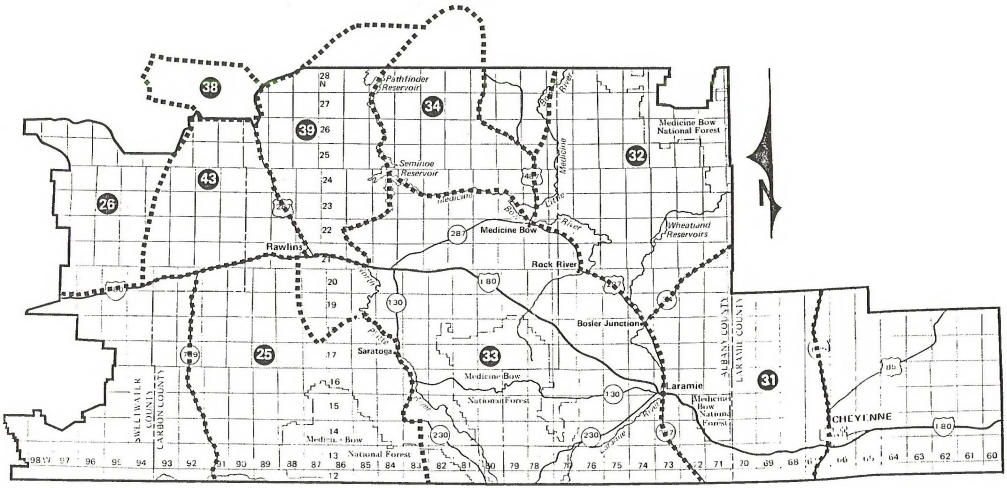
HERD UNIT NUMBER/NAME

- Bitter Creek
- Red Desert
- Chalk Bluffs
- Black Rock Hills

- 23 Iron Mountain
- 24 Dwyer
- 25 Medicine Bow
- 26 Cooper Lake
- 27 Centennial

- 30 Iron Springs
- 36 North Ferris
- 37 South Ferris
- 38 Baggs
- 44 Bates Hole

Map 41
ANTELOPE HERD UNIT AREA BOUNDARIES
(Revised from Draft Map 40)

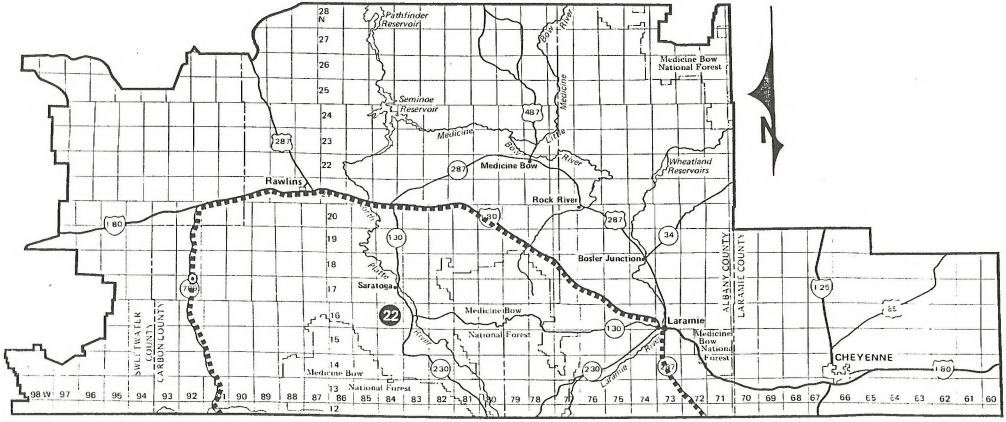


Herd Unit Area Boundary

HERD UNIT NUMBER/NAME

- Baggs
- Steamboat
- Iron Mountain
- Laramie Peak
- 31 Snowy Range
- 34 Shirley Mountains
- 38 Green Mountain
- 39 Ferris
- 43 Shamrock

Map 42
ELK HERD UNIT AREA BOUNDARIES
(Revised From Draft Map 47)
Medicine Bow-Divide Resource Management Plan

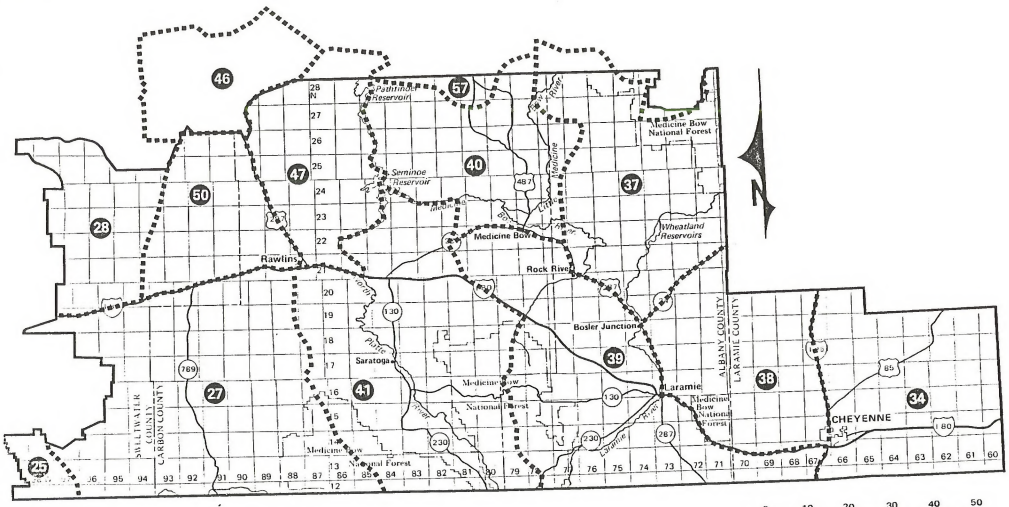


Herd Unit Area Boundary

HERD UNIT NUMBER/NAME

Snowy Range

Map 43
MOOSE HERD UNIT AREA BOUNDARIES
Medicine Bow-Divide Resource Management Plan



Herd Unit Area Boundaries

HERD UNIT NUMBER/NAME

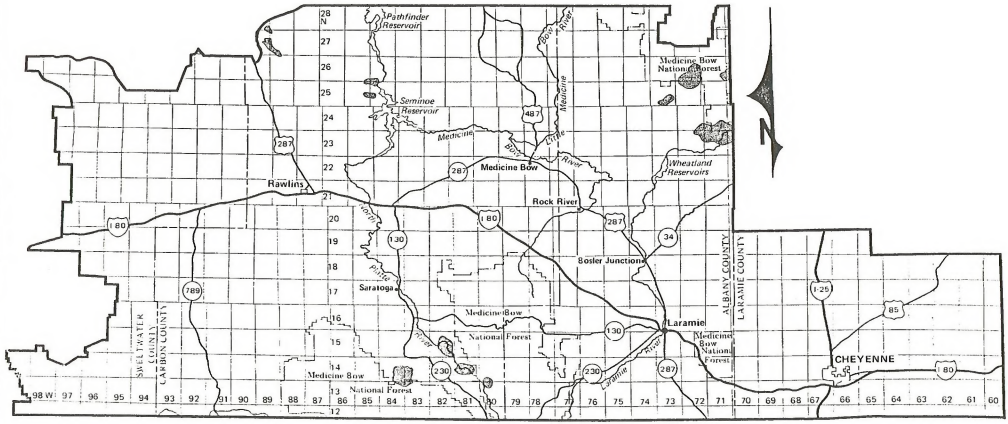
- 25 Black Butte
- 27 Baggs
- 28 Table Rock
- [illegible] eyenne
- 37 Laramie Peak
- 38 Iron Mountain
- 39 Sheep Mountain
- 40 Shirley Mountains
- 41 Platte Valley
- 46 Sweetwater
- 47 Ferris
- 50 Chain Lakes
- 57 Bates Hole

Map 44

MULE DEER HERD UNIT AREA BOUNDARIES

(Revised From Draft Map [illegible])

Medicine Bow-Divide Resource Mana[illegible]ent Plan



Map 45

BIGHORN SHEEP CRUCIAL WINTER RANGE

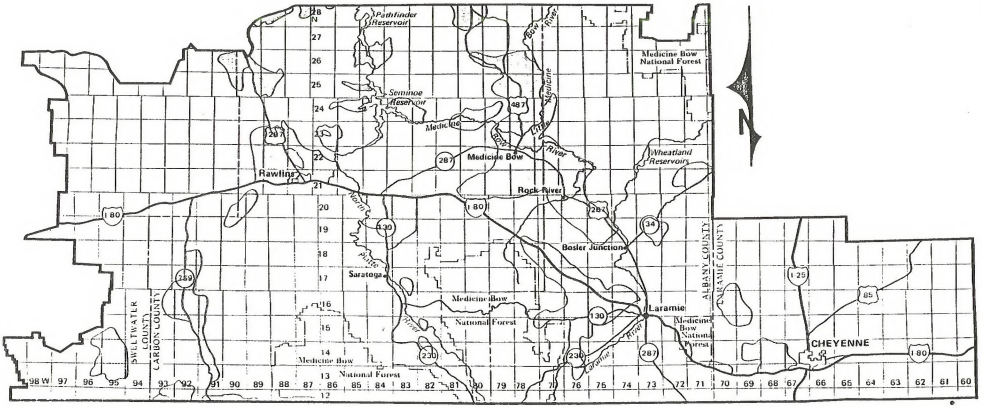
Revised From Draft Map 50

Map 4b

BIGHORN SHEEP CRUCIAL WINTER RANGE

(Revised From Draft Map 50)

Medicine Bow-Divide Resource Management Plan



Crucial Winter Range

Map 46

ANTELOPE CRUCIAL WINTER RANGE

(Revised From Draft Map 54)

Medicine Bow-Divide Resource Management Plan

The condition of Bighorn sheep habitat in Saratoga Valley is poor because of overuse by ungulates. As noted in the "Elk" section, enhancement of big game habitat through habitat manipulation projects is a primary objective for this area.

Deer

The following new paragraphs should be added on page 202, following the last paragraph in the left column:

In the Saratoga Valley proposed HMP area, crucial winter range for mule deer is threatened by habitat losses caused by subdivisions, agricultural development, and overuse by ungulates. As noted in the "Elk" section, enhancement of big game habitat through habitat manipulation projects is a primary objective for this area.

The Laramie Peak proposed HMP area provides important habitat for large numbers of mule deer. Maintenance and enhancement of adequate forage and cover for wintering mule deer is a wildlife objective for this area.

The proposed Jelm Mountain HMP area provides important habitat for mule deer. Maintenance and enhancement of mule deer habitat is a wildlife objective for the area.

Pronghorn Antelope

The following new paragraphs should be added on page 202, following paragraph 3 in the right column:

In the Saratoga Valley proposed HMP area, crucial winter range for antelope is threatened by habitat losses caused by subdivisions, agricultural development, and overuse by ungulates. Maintenance of big game habitat through habitat manipulation projects and modification of existing fences are primary objectives for this area.

The Laramie Peak proposed HMP area provides important habitat for large numbers of antelope. Maintenance and enhancement of adequate forage for antelope is a wildlife objective for this area.

The proposed Jelm Mountain HMP area provides important habitat for antelope. Maintenance and enhancement of antelope habitat and reduction of antelope-fence conflicts are wildlife objectives for this area.

Many of the pronghorn herds in the planning area make extensive migrations to and from winter ranges. Maintenance of these movements is a primary management concern. Shrub vegetation types predominate in many important wintering areas. Livestock management practices such as fencing and vegetation manipulation can create conflicts with pronghorn management.

Moose

A new section on moose should be added to the "Big Game" section, as follows:

Moose are present in relatively small numbers in the planning area. The highest populations are concentrated in the Platte Valley, but there also are moose in the Ferris-Seminoe-Shirley Mountain, and Laramie Peak HMP areas. Moose normally inhabit riparian areas, but they also can be found in sagebrush and forested vegetation types.

Upland Game Birds

Sage Grouse

In paragraph 3 of the section on sage grouse (next to last paragraph in right column, page 202) the last sentence should be changed to read as follows: Sage grouse avoid large stands of dense sagebrush **except during winters with deep snow when these stands are used for forage and cover** (Klebenow 1972; Wallestad 1971; **WGFD 1987).**

The map showing breeding/nesting grounds for sage grouse and sharp-tailed grouse (map 5 in the draft document) has been revised. The updated version appears in this document as map 47.

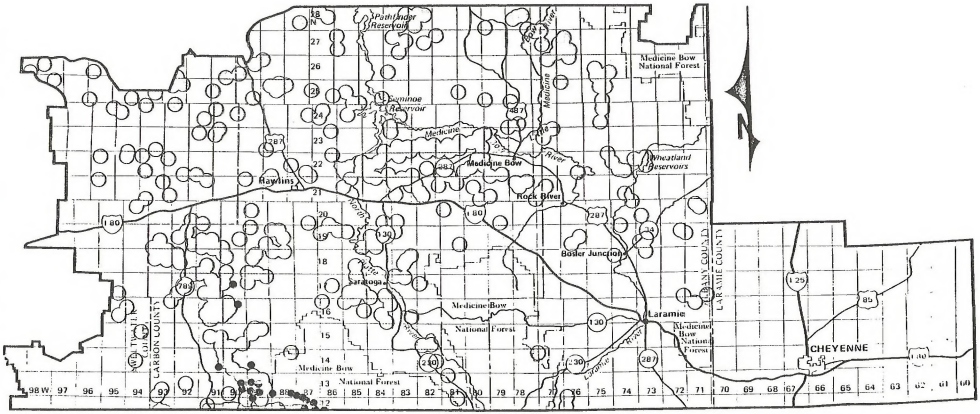
Raptors

Additional raptor surveys conducted since completion of the draft RMP/EIS resulted in delineation of one more raptor concentration area, the Ferris Mountains RCA. In addition, the Atlantic Rim RCA was redelineated as a result of these surveys (see maps 2, 6, and 8).

Threatened or Endangered Species

Bald Eagle

The first paragraph in the section on bald eagles (last paragraph in left column on page 20 should be corrected to read as follows:



○ Sage Grouse Breeding/Nesting Grounds

● Sharp-tailed Grouse Breeding/Nesting Grounds

Map 47
GROUSE BREEDING/NESTING GROUNDS
(Revised From Draft Map 56)
Medicine Bow-Divide Resource Management Plan

The Little Snake River and the North Platte River and associated drainages are major wintering areas for bald eagles. More than 50 wintering bald eagles have been documented along the Little Snake River **in Wyoming and Colorado. Similar numbers have been observed along the North Platte River from Pathfinder Reservoir to the Colorado state line.** Other important wintering areas are the Sand Hills area, the Muddy Creek-Dad Basin, **and the Laramie River.**

Two new sentences should be inserted in line 6 of the second paragraph of the "Bald Eagle" section (top paragraph, right column, page 208) following "night roosts," as follows: **One large night-roost site has been documented in the Pedro Mountains in a stand of mature ponderosa pines. Between 12 and 17 bald eagles have been observed using this site.**

A new paragraph should be added to the section on bald eagles, as follows:

There are six bald eagle nests on private lands along the North Platte River. An additional active nest is immediately south of the Wyoming-Colorado border along the Little Snake River. Nearly all nests are associated with cottonwood-riparian vegetation types, although nesting has been documented in association with cliffs and ponderosa pines.

Furbearers, Predators, and Trophy Game

Mountain Lion

The "Mountain Lion" section on page 209 should be revised to read as follows:

Mountain lion habitat is essentially that of the lions' prey—mule deer. In **the planning area,** mountain lions prefer conifer woodlands and juniper, mountain shrub, and rockland habitat types. Recent sightings have occurred in the **Ferris Mountains, the Seminoe Mountains, the Pedro Mountains, and the Bennett Mountains and in areas near the boundary of Medicine Bow National Forest.**

Fisheries

Habitat and Species

In the discussion of nongame fish species of concern to the WGFD (fourth paragraph in the right column on page 209), the reference to "bonytail" should be changed to **roundtail.**

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Chapter Four

Environmental Consequences

INTRODUCTION

This chapter presents the environmental consequences of management actions described in chapter 2 for the proposed RMP. Both beneficial and adverse effects are described.

Assumptions used in the analysis are the same as those presented in the draft RMP/EIS.

ANTICIPATED DEVELOPMENTS

The assumed levels of development that were used in the analysis of the proposed plan are presented here to give the reader a more complete understanding of the analysis. The following levels are projected for a 20-year period:

Clearcutting: 4,000 acres (average of 200 acres per year)

Temporary logging roads: 40 miles (average of 2 miles per year)

Land disposal: 10,000 acres (average of 500 acres per year)

Surface disturbance from the following activities is projected at the following rates:

Utility and transportation system development and maintenance: 5,030 acres (average of 251.5 acres per year)

Coal mining: 4,000 acres (average of 200 acres per year)

Oil and gas development: 34,355 acres (average of 1,717.75 acres per year)

Uranium mining: 1,500 acres (average of 75 acres per year)

EFFECTS ON CULTURAL RESOURCES/NATURAL HISTORY

Effects from Management Actions for Cultural Resources/Natural History

Under the proposed RMP, the Como Bluff NNL would be designated an ACEC. The management emphasis afforded by the designation would help to ensure the protection of cultural, natural history, and paleontological resources in the area.

The cultural resources program would stabilize and protect significant sites and segments along the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail. Listing on the National Register of Historic Places would be sought for these sites. These actions would help to ensure the preservation and interpretation of the resources for present and future generations.

Consideration would be given to transferring from federal ownership 160 acres in the proposed Gangplank NNL, 640 acres in the Big Hollow NNL, and 160 acres in the Sand Creek NNL. The areas would be considered for transfer to individuals, organizations, agencies, or institutions that would manage the areas in accordance with their NNL status. This could enhance management of the natural history values in the areas because the effectiveness of current BLM management is limited by lack of legal access to the relatively small public land parcels in areas that are predominantly in other ownerships.

Natural history values would be considered during the review of proposed surface-disturbing activities. This would enhance the designated and proposed NNLs by minimizing the disturbance of the values that characterize the areas.

Implementation of paleontological inventories in areas of surface disturbance would help to ensure preservation and interpretation of significant paleontological resources.

Effects from Actions Involving Surface Disturbance

Anticipated levels of surface disturbance are discussed at the beginning of this chapter. Actions involving surface disturbance would generate new inventory data about cultural, paleontological, and natural history resources. Such data are gathered in support of most surface-disturbing activities.

The potential exists for damage to cultural, natural history, and paleontological resources during surface disturbance. The data gathered and the potential for damage to irreplaceable resources are roughly proportionate to the amount of surface disturbance.

A total of 83,029 acres of the planning area would be withdrawn from locatable mineral development. This total includes 81,489 acres of existing withdrawals and 1,540 acres of new withdrawals. The withdrawals would include intact segments of the Overland Trail. The withdrawals

would protect cultural, natural history, and paleontological resources from potential disturbance due to locatable mineral development in the withdrawn areas. Outside the withdrawals, those resources could be damaged by locatable mineral development, an activity that has more potential for such damage than most other surface-disturbing activities.

Plans of operations would be required for locatable minerals activities that would cause surface disturbance (except casual use) in the Como Bluff proposed ACEC, regardless of the size of the disturbance . This would help to ensure the protection of cultural, natural history, and paleontological resources from disturbance associated with locatable mineral development.

Surface disturbance in the Como Bluff NNL, the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail would be managed through application of the Wyoming BLM standard mitigation guidelines. This would help to ensure the preservation of cultural, paleontological, and natural history resources in those areas.

Surface disturbance would be intensively managed within ¼ mile of exposures of the Morrison Formation in the Como Bluff NNL. This would help to ensure the preservation of cultural, paleontological, and natural history resources in that area.

Conclusion: The management actions for cultural resources and natural history in the proposed plan would help to ensure the preservation and interpretation of these resources for present and future generations. The management emphasis afforded by ACEC designation of the Como Bluff NNL would help to ensure the protection of cultural, natural history, and paleontological resources in the area.

The transfer of 160 acres in the proposed Gangplank NNL, 640 acres in the Big Hollow NNL, and 160 acres in the Sand Creek NNL to individuals, organizations, agencies, or institutions that would manage the areas in accordance with their NNL status could enhance management of the natural history values in the areas.

Actions involving surface disturbance would generate new inventory data about cultural, paleontological, and natural history resources.

Cultural resources (including intact segments of the Overland Trail), natural history resources, and paleontological resources would be protected from potential disturbance due to locatable mineral development by withdrawal of 83,029 acres. This total includes 81,489 acres of existing withdrawals and 1,540 acres of new withdrawals. Requirements for plans of operations for all but casual use of mining claims would help to ensure the protection of cultural, natural history, and paleontological resources in the Como Bluff proposed ACEC.

The application of the Wyoming BLM standard mitigation guidelines in the Como Bluff NNL, the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail would help to ensure the preservation of cultural, paleontological, and natural history resources in those areas. Intensive management of surface disturbance within ¼ mile of exposures of the Morrison Formation in the Como Bluff NNL would help ensure the preservation of cultural, paleontological, and natural history resources in that area.

EFFECTS ON FORESTRY

Actions of the proposed RMP would enhance the forest's growth and diversity. Timber would be harvested at a recently recalculated allowable harvest level that incorporates new inventory data and revised harvesting restrictions.

Commercial forestland in the planning area would be harvested at a rate of 20 MMBF per decade from an available base of 25,866 acres. Included in this acreage would be 6,707 acres of limited forest management activities. There would be no harvesting on 309 acres of commercial forestland. The harvest level would be about 77% of the planning area's sustained-yield capability. Around 77% of the commercial forestland would be harvested over the next 100 years.

The forest management actions would have no appreciable impacts on the forest resource in the short term.

The condition of about 77% of the commercial forestland would improve over the long term because mature and overmature trees would be removed and replaced with healthy reproduction. Activities would be implemented to control insect and disease problems. The success of these activities would be site specific and would depend on the timeliness and the level of implementation of control measures.

Table 12, which outlines the change in age-class distribution of lodgepole pine over the next 100 years, shows that there would be a great improvement in age-class distribution.

The condition of the commercial forestland that would not be harvested in the next 100 years (approximately 23% of the base acreage) would

TABLE 12

LONG-TERM (100 YEARS) AGE CLASS REDISTRIBUTION OF LODGEPOLE PINE UNDER THE PROPOSED RMP

Age Class	Present Situation (percent)	Long-Term Change (percent)	Ideal Age Class Distribution (percent)
0-10	6%	8%	10%
10-40	15%	24%	30%
40-70	14%	24%	30%
70 or more	65%	44%	30%

continue to deteriorate with increased insect, disease, and stagnation problems.

Consolidation of landownership on Elk Mountain and Shirley Mountain would have a long-term beneficial effect on the forest resource because insect and disease control would be more effective. Forest management activities would not be constrained by ownership boundaries; therefore, each problem area would be treated as an entity and in a timely manner. This would greatly improve the degree of success for the particular control measure. The overall condition of the forestlands would improve in the long term.

The proposed RMP would provide timber to the local wood products industry at a higher level than in the past, with about a 50% increase in the amount of wood products made available. The average annual timber harvest would be 2 MMBF. This level of production would account for 20 jobs in the planning area. The annual revenue generated in the economy of the planning area by this harvesting would amount to about $1,474,000. At an average stumpage value of $20 per MBF, the timber harvested would generate $40,000 per year to the United States government in timber sale receipts.

Conclusion: The proposed RMP would provide an opportunity for improving the health and productivity of a large part of the forestland in the planning area. More wood products would be provided for private industry than under present management. About 77% of the commercial forestland would be under some intensity of management over the next 100 years. Restrictions prohibiting harvesting would prevent the development of a healthy productive forest on 309 acres of commercial forestland.

Forestland productivity would be expected to increase with time; consequently, the planning area's sustained-yield capability would be greater. Wood products would be available to industry above current levels. In addition, consolidation of landownership on Elk Mountain and Shirley Mountain would enhance the forest resource by facilitating insect and disease control.

EFFECTS ON LANDS PROGRAM

Under the proposed RMP, lands would be identified for disposal for community expansion and public services near Bairoil, Baggs, Rawlins, Red Desert, and Wamsutter. Communities partially or totally surrounded by public lands would have increased opportunities to acquire public land for development of public services or private uses that otherwise might not be available.

Areas containing high value or fragile cultural and natural history resources, visual resources, watersheds and soils, and wildlife habitat would be identified as avoidance areas for utility and transportation systems (see map 14). Routing developments around such areas could force installation of facilities in less than ideal areas that would be longer, rougher, and more difficult to reclaim. This could increase project costs. Relatively small avoidance areas would not have as great an effect as larger ones, since small areas generally could be avoided easily. If an area could not be avoided, effects of facility development would have to be mitigated, and mitigation would

add cost to the project. The amount of any increased cost cannot be determined at this time.

EFFECTS ON LIVESTOCK GRAZING

Introduction

Under the proposed RMP, the BLM would manage the vegetative resource to enhance livestock grazing while maintaining a balance between economic uses and management for enhancement of wildlife habitat, watershed, and riparian vegetation. Vegetation condition would be improved on "I" category allotments through intensive grazing management. New AMPs would be developed and projects implemented in support of those AMPs.

Any effects discussed are those that would occur in the Medicine Bow grazing EIS area unless otherwise specified. Effects in the Divide-Seven Lakes grazing EIS area have been analyzed in previous documents (USDI, BLM n.d., 1978a, 1983a, 1983b).

Throughout the discussion of effects on livestock grazing, changes in AUMs of forage availability are projected, as is the percentage of change. These projections are made for the purposes of analysis only. Specific adjustments would be determined following more detailed analyses made with the use of adequate monitoring data.

No immediate change in livestock grazing use would be proposed for the Medicine Bow grazing EIS area under this alternative. However, existing data were used to predict how future ecological condition would change. The management actions discussed below and the livestock adjustments due to monitoring would affect the availability of forage. Livestock grazing use in the Medicine Bow grazing EIS area would be expected to increase above the active preference level in the long term. Projected range improvements and long-term ecological condition for the proposed RMP would be the same as those presented for Alternative D on tables LVGR-AP-4 and LVGR-AP-6 in the livestock grazing appendix to the draft RMP/EIS.

Effects from Management Actions for Various Programs

Forestry Actions

Approximately 2,737 AUMs of additional forage would be available for livestock grazing in the long term as a result of the proposed clearcut harvest of 200 acres of sawtimber per year and the removal of 500 acres of noncommercial, nonproductive stands over the next 20 years. This is 80% of the total forage available to be utilized by livestock and wildlife from increased understory production due to harvest.

Lands and Minerals Actions

Divide and Seven Lakes Grazing EIS Areas

Management actions for lands and minerals would slightly reduce available forage in the Divide and Seven Lakes EIS areas. The acreage disturbed and not reclaimed (and therefore taken out of forage production) would amount to approximately 12,799 acres (2,133 AUMs) over the next 20 years. This is about 1% of the available AUMs in the Divide and Seven Lakes portion of the planning area, so the loss would be minimal.

Some individual livestock operations could be directly affected by a lands or minerals action. If sufficient acreage was removed from the grazing base in an individual allotment, the livestock operator in that allotment might be forced to rent private pasture or to feed additional hay. The exact location and extent of future lands and minerals actions (and thus the effect on individual allotments) cannot be predicted.

Medicine Bow Grazing EIS Area

The effects on livestock grazing from management actions for lands and minerals in the Medicine Bow grazing EIS area would amount to a loss of 10,936 acres (1,823 AUMs) from the public land grazing base in the next 20 years. Actions that would cause this loss are land disposals (8,500 acres, 1,417 AUMs), utility and transportation systems (970 acres, 162 AUMs), locatable minerals (500 acres, 83 AUMs), oil and gas devel-

opment (966 acres, 161 AUMs), and coal development (all acreage disturbed would be reclaimed).

Livestock Grazing Management Actions

Grazing systems or AMPs would be developed in the Medicine Bow grazing EIS area for intensive management of 13,140 acres of crucial winter range for big game (see maps 25, 26, and 27). The improved habitat condition would benefit both wildlife and livestock grazing. In the short term, a small amount of forage would be unavailable for livestock grazing. The winter ranges would be expected to improve through management and might produce additional forage in the long term that could be available to livestock.

The effects of implementation of 55 AMPs and construction of projects in support of these plans would provide an increase in AUMs in the long term. Grazing systems, an integral part of any AMP, might require greater stocking rates on smaller portions of the allotment. This increased utilization in the grazed area allows the ungrazed areas to rest while providing more even utilization of the vegetation in the grazed areas. The plants in the ungrazed areas are allowed to increase in vigor, storage, and reproduction, and this leads to increased production the following year. These positive aspects of rest outweigh the increased utilization of forage in years when an area is grazed (USDA, SCS 1971; USDA, FS 1971).

On the basis of a review of grazing systems in the western states by Van Poolen and Lacy (1979) and analysis of existing ecological conditions and trends by the resource area range staff, it is estimated that a 20% increase in AUMs would be realized through implementation of grazing systems and AMPs in the long term.

The fences and water developments required in the implementation of grazing systems and AMPs would have an initial inconsequential impact on livestock grazing through loss of vegetation at the project site.

Burning or spraying of brush species would be designed to enhance productivity of the herbaceous vegetation. Approximately 58,308 acres on 43 allotments would be identified for this kind of treatment. Once established, brush species such as big sagebrush are very tenacious and long-lived. Uncontrolled competition from these brush species for water and nutrients reduces the productivity of the herbaceous plant species in the community.

The exact change in composition from sagebrush/grass to grasses and forbs after burning or spraying cannot be predicted because of variation in the range sites. However, spraying has reduced big sagebrush 67% to 100% in some areas (Blaisdell and Mueggeler 1956). Burning of sagebrush in one experiment produced a 90% increase in production of grasses and forbs (Pechanec, Stewart, and Blaisdell 1954). In a review of sagebrush spraying in Wyoming, Kearl (1986) found that forage production increased 167%.

It has been assumed that a 100% increase in forage would be available as a result of burning or spraying. It is estimated that 80% of the additional forage would be available to livestock under the proposed RMP; therefore, an additional 14,460 AUMs would be available for livestock grazing. Other benefits to livestock grazing would be due to reduced utilization and possibly to better distribution of livestock in other areas of individual allotments. Better forage condition and increased use of more desirable species in the burned or sprayed areas also would benefit livestock.

Vegetation in riparian areas would be improved through management. Management actions could include fencing to exclude livestock grazing. Approximately 67 acres of riparian stream zones in "I" allotments would be fenced to improve the areas to good condition, or better. Once the areas were improved to good condition, they would be incorporated into the grazing systems for the allotment on a limited basis. The short-term result of the fencing would be elimination of approximately 34 AUMs of available forage for livestock. Some percentage of this total would be available in the long term through the AMP process.

An additional total of 1,658 acres of riparian vegetation would be improved to good or better condition through the AMPs developed for the "I" allotments. The result of this action would be an increase in forage available for livestock grazing. The increase in available AUMs for livestock grazing that would result from this action is included in the above total of increased AUMs from AMP development. This improvement would require a longer time to occur than the improvement due to fencing and exclusion of grazing.

Existing data were used to predict future changes in ecological condition and livestock adjustments due to monitoring. As discussed in the analysis of the effects on vegetation, trends in ecological condition in the Medicine Bow grazing EIS area would be expected to improve in the long term under the proposed RMP. It is projected that the amount of forage available to livestock would increase in the long term to 186,092 AUMs from the present 161,311 AUMs.

Conclusion: The long-term availability of forage for livestock grazing would be expected to increase to 186,092 AUMs under the proposed RMP. A total of 880 additional AUMs would be available in the long term as a net result of management actions for lands, minerals, and forestry, together with the exclusion of livestock from riparian areas. Therefore, the total long-term amount of forage available for livestock would be expected to be 186,972 AUMs. This figure is 16% above active preference and 27% above the 5-year average licensed use level.

Management actions for lands and minerals would reduce available forage in the Divide and Seven Lakes EIS areas by about 1% over the next 20 years.

EFFECTS ON MINERAL RESOURCES

Effects on Leasable Minerals

Coal

Effects from Management Actions for Various Programs

Coal Management Actions. Under the proposed RMP, 55,990 acres containing approximately 411.8 million tons of coal would be available for further consideration for leasing. The availability of this coal would allow the BLM to respond to demand more efficiently than at present. It also would improve the BLM's flexibility to respond to changes in demand.

Wildlife and Fisheries Actions. Committed mitigations in the Atlantic Rim coal area would increase mining costs, especially in cases where reclamation or other expenditures would be required on site as well as off site. Increased costs could affect the efficiency of coal development in this area.

Oil and Gas

Effects from Management Actions for Various Programs

Cultural Resources/Natural History Actions. The Como Bluff area has a moderate potential for oil and gas development. Intensive management to mitigate surface disturbance under ACEC designation could cause delays, increased expenses, and discourage exploration and development.

Lands Management Actions. Disposal of public lands could affect the cost of mineral development to some extent by creating "split estate." Over the next 20 years, some of the 10,000 acres of public land that would be transferred from federal ownership could be subject to these effects. The magnitude of this situation is expected to be minimal because lands with known mineral value normally would not be disposed of. However, it is possible that the BLM could dispose of lands containing unknown mineral values where current knowledge of existing minerals is inadequate. The minerals, if reserved by the United States, would be legally available for development. It would then be necessary for those wanting to develop the minerals to negotiate with the new surface owner as well as with the BLM. This could result in higher development costs.

Oil and Gas Management Actions. The magnitude of the effects of surface protection and seasonal stipulations on oil and gas management is difficult to predict; generally, it would depend on the total acreage and the size of the public land blocks covered by restrictions. Estimates of the acreages affected by lease stipulations under the proposed RMP are listed in chapter 2 of this document. These acreage figures are not additive because the areas overlap; however, they indicate that more acreage would be affected under the proposed RMP than under present management. The effect of such stipulations would be consequential only on larger blocks of public lands where they could affect the availability of oil and gas resources by making exploration and development less efficient.

Seasonal restrictions would affect the availability of oil and gas in approximately 28% of the planning area, the same amount as is affected under present management. The potential effects of surface protection and seasonal stipulations and the variables that influence the magnitude of those effects are discussed in the "Assumptions for Minerals" section of the draft RMP/EIS.

Wildlife and Fisheries Actions. Under the proposed RMP, several areas would be designated ACECs and managed to protect habitat values. Areas that would be so designated are two raptor concentration areas (27,500 acres), the Jep Canyon proposed ACEC (13,320 acres), and the Sand Hills area (8,300 acres). In addition, surface-disturbing activities would be intensively man-

aged in the Baggs elk crucial winter range to prevent loss of significant elk winter habitat and in overlapping big game crucial winter ranges to maintain habitat quality. The resulting more intensive mitigation to protect higher priority resources would influence drill pad locations. Limitations caused by more stringent stipulations could make the most efficient field development impossible. If federal minerals were drained by other operations, royalities would be lost. The mitigation of the effects of surface disturbance to restore or replace lost habitat could increase reclamation expenses to the extent that oil and gas development would be precluded.

Effects on Locatable Minerals

Effects from Management Actions for Various Programs

Cultural Resources/Natural History Actions

The designation of a 1,760-acre ACEC at Como Bluff would require that a plan of operations be filed and approved for any surface-disturbing activities within the ACEC boundaries. Approval of a plan of operations can take up to 90 days. Timely and efficient prospecting, exploration, and development could be adversely affected under an ACEC designation.

Lands Management Actions

A total of 10,000 acres of public land would be transferred from federal ownership over the next 20 years. If such actions resulted in split estate, some of this acreage could be subject to problems similar to those described in the section on effects on oil and gas, above.

Locatable Minerals Actions

Under the proposed RMP, 821,507 acres of existing withdrawals would be revoked. A total of 81,493 acres of existing withdrawals would be continued, and new withdrawals would be proposed for 1,540 more acres. Mineral development would not be permitted on the withdrawn lands; however, the effect on the availability of locatable minerals would be minor because of the relatively small amount of federal mineral estate that would be withdrawn (less than 2%).

Wildlife and Fisheries Actions

To protect wildlife values, 49,120 acres would be designated ACECs. Plans of operations would be required for actions in these areas. The necessity of filing plans of operations could inhibit timely and efficient development of locatable minerals.

Conclusion: Under the proposed RMP, the BLM's flexibility to respond to changes in the demand for coal would be improved over present management. All areas with development potential would be available for leasing consideration.

Surface protection restrictions would affect the availability of oil and gas on more acreage than under present management. Seasonal restrictions would affect the availability of oil and gas in approximately 28% of the planning area, the same amount as is affected under present management.

Mineral exploration and development would be affected by management requirements on 49,120 acres designated ACECs. Mineral location would be prohibited on 81,489 acres of existing withdrawals and 1,540 acres of new withdrawals.

EFFECTS ON RECREATION

Introduction

The objectives for recreation management would be achieved through consolidation of land-ownership on lands with high recreational value, pursuit of access to such acres, and provision of additional recreational developments.

Effects from Management Actions for Various Programs

Cultural Resources/Natural History Actions

Certain historic sites along the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail would be stabilized. Interpretation of these sites would benefit the recreating public by heightening awareness and appreciation of these historic trails. Interpretation of the trails would enhance historic area sightseeing. However, legal public access to these trails is limited; therefore, a significant increase in use would not be anticipated.

Livestock Grazing Management Actions

Improvement of 85 miles of aquatic habitat would enhance opportunities for fishing in small streams and beaver ponds.

Minerals Actions

Leasable Minerals

Coal. Except in the Atlantic Rim area, development of coal generally would not have an adverse effect on recreation opportunities. The analysis of effects on wildlife for this alternative indicates that elk and mule deer could be displaced by development of the Atlantic Rim coal. If this happened, the quality of hunting would be reduced in the northern segment of the Baggs elk herd.

Development of the Atlantic Rim coal would not have an adverse effect on the Continental Divide National Scenic Trail. The coal area lies west of the east rim of the Continental Divide. Bridger Pass, where the divide turns to the northeast, is less than a mile from the coal area. The remaining length of the divide in the vicinity (about 4 miles) is more than a mile away. While draglines, dust, and smoke might be visible to trail users, the impact from this would be minimal, and these coal activities would be visible for only a short distance.

Oil and Gas. The Wyoming BLM standard mitigation guidelines would protect recreation values in existing and proposed recreation sites and the North Platte River SRMA (¼ mile on either side of the river). This would prevent conflicts between recreationists and oil and gas development activity in these areas and would ensure that the proposed sites would remain intact for future recreation site construction.

Locatable Minerals Actions

Locatable minerals actions under the proposed RMP would have both positive and negative effects on recreation. A positive effect would result from withdrawal of existing and planned recreation sites from locatable mineral location. This would protect the BLM's investments in public improvements and the recreation opportunities available. While the likelihood of mining within most of the recreation sites is low, withdrawing them from all forms of mineral location is the only sure way of giving these sites long-term protection from mineral development.

None of the land adjacent to the North Platte River would be withdrawn from mineral location. Of main concern are areas that have high value for recreation and moderate or high potential for locatable minerals. Two stretches of river meet these criteria—1,550 acres adjacent to Bennett Peak and 795 acres adjacent to Big Creek. Both stretches are important for fishing. (The quality of the experience in these areas is measured not only in the quality of the fishing, but equally in the quality of the natural setting in which the activity occurs.)

There is moderate potential for locatable minerals along the North Platte in the areas mentioned above. While there are no mining claims in either the Bennett Peak area or the Big Creek area at present, there is no assurance that interest by mining concerns will remain low; thus, there is no assurance that the quality of the recreation experience will remain intact in the long term.

Recreation Management Actions

ORV designations would provide the maximum benefit to ORV users without unnecessarily restricting users or unnecessarily damaging other resources.

ORV use in the Sand Hills management area would be limited to existing roads and trails. Hunters (the primary recreation users) would be allowed vehicle access through the area, as at present. Emphasis would be placed on mitigation of impacts and rehabilitation of specific problem areas as they were identified.

The proposed Dune Ponds cooperative management area is easily accessible. This allows for generally unregulated ORV play on a relatively small area near Rawlins, a major population center in the planning area. Under the proposed plan, ORV use would be limited to existing roads and trails and to open sand areas west of the Carbon County Road 351, and rehabilitation or mitigation would be carried out in specific problem areas. These actions would allow for continued recreational ORV use but reduce conflicts of that activity with fishing and wildlife habitat management.

Landownership is mixed in the West Seminoe area, a popular area for hunting and fishing. Limitation of ORV use to designated roads and trails in that area would help to solve some conflicts that have been occurring on private land, thus helping to preserve public access into the area.

Consolidation of landownership in areas identified in chapter 2 could benefit recreation because it would reduce the necessity for recreationists to know about different access require-

ments on lands under various ownerships. This could enhance recreation opportunities, including those for hunting and fishing.

Visual Resource Management Actions

Visual resource management actions under the proposed plan would benefit recreation resources by maintaining the quality of the settings of recreation opportunities. Visitors would be able to enjoy recreation opportunities in settings essentially unaltered from the present. VRM designations would directly benefit the Continental Divide National Scenic Trail SRMA because about 50 miles of the trail falls within VRM Class I and II areas. These classifications mean that visual intrusions would be limited and the high-quality visual setting would be maintained for trail users.

Conclusion: The proposed RMP generally would enhance recreation resources. However, lands along the North Platte River would not be protected from locatable minerals activities. While the likelihood of minerals activity along that river may be low, there would be no assurance under this alternative that the quality of the river's recreation opportunities would be maintained in the long term. The quality of hunting in the Atlantic Rim area might be reduced if big game populations declined because of coal development.

EFFECTS ON SOILS, WATER, AND AIR

Effects from Management Actions for Various Programs

Fire Management Actions

Quick suppression of fires in full suppression areas would minimize the amount of soil exposed to wind and water erosion. If heavy equipment was used to construct fire lines, soil would be compacted and vegetation, including root material, would be removed. Fire lines could act as channels for surface water flow, causing gully erosion. Overall, the effect of reducing the acreage exposed to wind and water erosion probably would outweigh the effect of increased gully erosion along fire lines.

Impacts in areas of "full suppression with management options" would be similar to those in full suppression areas, but the use of heavy equipment to construct fire lines would be more controlled, so that the effect of increased gully erosion along fire lines would be less than under full suppression.

Limited suppression could result in the exposure of large amounts of soil to wind and water erosion if a fire burned a large acreage. However, the effect of increased wind and water erosion from limited fire suppression is not likely because most of the limited suppression areas have low vegetative production with little fuel to carry a large fire.

The overall effects on soils, water, and air from fire suppression zone designation would be expected to be minor.

Forestry Actions

Under the proposed RMP, 19,159 acres (17% of the forestlands) would be intensively managed for forest products. Timber harvest would cause surface disturbance in intensively managed areas. The potential for short-term acceleration of erosion, local degradation of air quality, and degradation of water quality above acceptable levels is high, but proper timber harvest techniques would be expected to keep these effects to a minimum.

In the long term, forest management actions would improve the health and vigor of the forest, reducing the chance of widespread loss of forest vegetation through insects, disease, and fire. Because good vegetative cover would be ensured, accelerated erosion would be reduced and water quality would be maintained or improved in the long term.

Precommercial thinning would total about 900 to 1,150 acres in the next 20 years. In addition, about 500 acres of nonproductive stagnated stands would be removed and replaced with new, vigorous trees. This would have minimal short-term effects on soils, water, and air resources because the methods employed would cause little surface disturbance. Long-term benefits would result from this action, as described above.

Removal of trees would have the effect of producing additional runoff. This is because trees transpire large quantities of water, and clearcut and thinned areas tend to accumulate more snow than densely forested areas (USDA, FS 1985). The additional runoff would not be expected to cause the effects of downcutting and gullying because a relatively small area would be cut at any one time and because of mitigative measures used in the design of forest management activities.

Restricted harvest on 6,707 acres (6% of the forestlands) would have minimal effects because

proper timber harvest techniques would be used to limit erosion and degradation of water and air quality.

Timber harvesting would be prohibited on 309 acres (less than 1% of the forestlands). In the short term, this would prevent potential accelerated erosion, local degradation of air quality, and degradation of water quality. However, over the long term, the health and vigor of the forest on these acres would decline, increasing the chance of loss of commercial forest vegetation through insects, disease, and fires. Such a loss of vegetative cover would increase erosion and degrade water quality. The effect of insect and disease losses would be expected to be minimal because vegetation loss would be gradual over time, and understory vegetation would replace lost vegetation.

Forests would be managed to enhance other uses on 85,228 acres, or 77% of the forestlands in the planning area. The minimal harvest in these areas would be designed with protection of soil, water, and air resources as a primary goal. Impacts from surface disturbance related to forest management would be minimal.

Lands Management Actions

Installation of utility systems and other facilities would cause short-term effects on soils, water, and air until the disturbed area had been reclaimed. The major effects would be increased wind and water erosion, potentially increased sedimentation during construction, and increased dust particulates in the air during construction.

Long-term effects would be associated with access routes to utility and transportation facilities. Travel on unpaved roads would add particulates to the air. This effect would be localized and would not violate ambient air quality standards. Increased erosion and sedimentation would occur from compaction, destruction of vegetative cover, and channelization of surface runoff in ruts and road ditches.

Livestock Grazing Management Actions

Livestock grazing management would be designed to enhance grazing while balancing economic use and management to enhance wildlife habitat, watershed, and riparian values. The development of planned range improvements and new AMPs on "I" allotments would benefit soil, water, and air resources by reducing accelerated erosion and degradation of water quality in "I" allotments.

Ecological condition would not improve in other allotments with a downward trend. Vegetative cover generally would be decreased as condition continued to decline. This would lead to reduced water quality and increased rates of accelerated erosion until livestock management practices in these allotments could be modified.

Planned range improvements would be designed with full consideration of soil, water, and air resources. These improvements could reduce accelerated soil erosion and enhance water quality by controlling stream flows, making them less erosive and protecting streamside vegetation. This would maintain soil productivity and water quality.

Livestock would be temporarily excluded from 67 acres of riparian areas until conditions improved sufficiently to allow limited seasonal grazing. In addition, 1,658 more acres of riparian areas would be improved through grazing systems, and fencing of reservoirs would improve 56 acres. Vegetative cover should increase in some of these areas where accelerated erosion is not too far advanced, albeit more slowly than if grazing were excluded for a period of time. In the long term, this would lead to decreased rates of accelerated erosion, which would enhance water quality by reducing salt and sediment loading.

Any changes in kind of livestock from sheep to cattle would be accompanied by appropriate management actions to maintain or improve riparian conditions. This would improve stream bank stability, thereby reducing stream bank erosion and improving water quality.

Minerals Actions

Leasable Minerals

Coal. Under the proposed RMP, 55,990 acres would be available for further consideration for coal leasing. However, it is projected that about 4,000 acres would be disturbed over the next 20 years regardless of the amount available.

Of the total acreage available, 49,650 acres have potential for surface or subsurface coal mining. Surface disturbance from surface coal mining has a higher potential to cause unacceptable rates of accelerated erosion on specific sites than any other anticipated coal mining activity because of the magnitude of vegetation removal, soil disturbance, and soil compaction.

Coal mining has a high potential to affect water and air quality through sedimentation from ero-

sion, disruption of aquifers, use of heavy equipment, and introduction of dust particles into the air. The magnitude of effects depends on many factors, including the size of the area disturbed, the erodibility of soils disturbed, the steepness of the terrain, and the precipitation patterns in the area. Reclamation and proper mining techniques should offset these effects.

The potential for unacceptable impacts for soils, water, and air resources is greatest for the 3,650 acres that would be available on Atlantic Rim. That area includes Jep Canyon, Snowshoe Canyon, and Hay Gulch. Steeper slopes in those drainages tend to accumulate snow, providing moisture for the heavier vegetative cover found there. If these drainages were mined, the vegetative cover and existing contours would be difficult to replace. It is unlikely that predisturbance vegetation could be replaced because topographic and microclimatic conditions required to produce this vegetative community would be eliminated. Because of the potential effects in these areas, aspen patches in the major drainages would be protected from disturbance by mining or related support facilities (see the Coal appendix to this document). However, regardless of whether the drainages were mined, harsh climatic conditions in the form of high winds and cold temperatures, along with shallow soils, would make reclamation difficult in the Atlantic Rim area.

A total of 6,340 acres could be considered only for in situ coal development, which affects soils, water, and air less than surface mining. Surface disturbance from in situ development would be less than that from surface mining; roads, drill pads, surface facilities, and pipelines would cause most of the disturbance. Most impacts from in situ coal development should be mitigated through reclamation because the duration of activity for this type of development is shorter than in other methods, and less surface is disturbed.

Impacts from subsurface and surface coal mining, in which the duration of activity is longer and disturbance is more drastic than in in situ mining, should be mitigated somewhat by reclamation in the short term. In the long term, these impacts should be mitigated by reclamation after activities ended and vegetation communities became more established.

Oil and Gas. Surface disturbance from oil and gas exploration and development would be restricted in certain areas, including steep slopes, riparian areas, perennial surface water, historic trails, VRM Class I and II areas, recreation sites, sage grouse leks, and high priority wildlife habitat. Estimates of the acreages affected by these restrictions under the proposed RMP are listed in chapter 2. These acreage figures are not additive because the areas overlap; however, they indicate that more acreage would be affected under the proposed RMP than under present management. Surface disturbance from oil and gas exploration and development would be restricted seasonally on 1.4 million acres. Surface disturbance on these areas would be mitigated through application of the Wyoming BLM standard mitigation guidelines. This should maintain water and air quality and prevent unacceptable rates of accelerated erosion in these areas.

Locatable Minerals

Approximately 83,029 acres would be withdrawn from locatable mineral activities under the proposed RMP. This total includes 81,489 acres of existing withdrawals and 1,540 acres of new withdrawals. Locatable minerals exploration and development involves the use of vehicles and heavy equipment, which can cause compaction and physical disturbance of soils and removal of vegetation. Withdrawal would prevent potential accelerated erosion and degradation of water and air quality that could result from these activities, but on much less acreage than under present management.

A total of 50,880 acres would be designated ACECs in this alternative, and plans of operations would be required for all but casual use on mining claims. This would provide for mitigation of effects on soils, water, and air quality from development of locatable minerals in the ACECs.

Recreation Management Actions

Areas designated for limited ORV use would confine to existing roads and trails such effects as compaction, soil displacement, and runoff channelization caused by wheeled vehicles.

In the proposed Dune Ponds Cooperative Management Area, continued ORV use would continue to affect soil, water, and air resources. ORV use would prevent revegetation of the sand dunes. Shifting sands would continue to bury downwind vegetation; thus, vegetation would be destroyed both on site and off site, increasing the amount of bare soil, reducing soil productivity, and increasing the area exposed to wind erosion. A riparian area downwind of the area might be buried in the long term. These effects would be great in and adjacent to the Dune Ponds ORV area, but they would not be consequential in the context of the planning area as a whole because of the small size of the area involved.

Soils, Water, and Air Actions

Management actions for soils, water, and air in the Muddy Creek, Sage Creek, and Second and Third Sand creeks watersheds would minimize potential soil compaction, vegetative cover removal, sedimentation of streams, degradation of air quality, erosion, and contamination of groundwater from surface-disturbing activities. These actions also would help to ensure that effects would be tolerable in the critical watersheds and that soil, water, and air objectives would be met. Standard management practices would continue to meet soil, water, and air objectives outside of the critical watersheds.

Wildlife and Fisheries Actions

Management actions for wildlife would protect riparian areas, improve vegetative cover, and reduce surface disturbance on more acreage than under present management. This would benefit soil, water, and air resources by restricting surface disturbance and reducing the potential for resulting accelerated soil erosion.

Conclusion: Intensive forest management on 19,159 acres (17% of the forestlands) would lead to acceleration of soil erosion, local degradation of air quality, and degradation of water quality, but proper timber harvest techniques would keep these effects to a minimum. In the long term, forest management would help to ensure good vegetative cover, which would reduce accelerated erosion and improve water quality.

Restricted harvest on 6,707 acres (6% of the forestlands) would have minimal effects. On 309 acres (less than 1% of the forestlands) where harvesting would be prohibited, the decline in health and vigor of the forest could increase erosion and degrade water quality in the long term if wildfire occurred.

Installation of utility and transportation systems and other facilities would lead to increases in soil erosion, sedimentation (during construction), and dust particulates in the air.

Improvement in trend and vegetative cover in "I" category allotments would lead to decreased rates of accelerated erosion. A reduction in accelerated erosion would enhance water quality by reducing salt and sediment loading. In other allotments with a downward trend, vegetation condition would not improve, and this would lead to increased rates of accelerated erosion and reduced water quality.

Improvement of 1,781 acres of riparian areas through grazing management actions would increase vegetative cover and decrease rates of accelerated erosion. The improvement in riparian vegetation could occur somewhat slowly because of continued grazing during the improvement period. In the long term, reductions in salt and sediment loading would enhance water quality.

Changes in kind of livestock from sheep to cattle would be accompanied by management actions to improve riparian condition. These actions would improve stream bank stability, reduce stream bank erosion, and improve water quality.

Under the proposed RMP, 55,990 acres would be available for further consideration for coal leasing. In the long term, reclamation and proper mining techniques should offset effects caused by coal mining.

The potential for unacceptable impacts on soils, water, and air resources from coal mining is greatest for the 3,650 acres that would be available on Atlantic Rim. Aspen patches in the major drainages would be protected from disturbance by mining or related support facilities, but reclamation in the Atlantic Rim area would be difficult because the soils are shallow and the area is subject to high winds and cold temperatures.

Water and air quality would be maintained and unacceptable rates of accelerated erosion would be prevented in areas protected by surface disturbance restrictions and by seasonal restrictions on oil and gas exploration and development (1.4 million acres).

Withdrawal of 83,029 acres (81,489 acres of existing withdrawals and 1,540 acres of new withdrawals) from locatable minerals activities would prevent accelerated erosion and degradation of water and air quality from these activities. Soils and water would be protected and air quality maintained on [illegible]90 acres of proposed ACECs because plans of operations would be required for all mining activity but casual use.

In the Muddy Creek, Sage Creek, and Second and Third Sand creeks watersheds, management actions for soils, water, and air resources would minimize potential soil compaction, removal of vegetative cover, sedimentation of streams, degradation of air quality, accelerated erosion, and contamination of groundwater.

Surface disturbance would be restricted and the potential for accelerated soil erosion would be reduced under the proposed plan

by management actions for wildlife that are designed to protect riparian areas, improve vegetative cover, and reduce surface disturbance.

EFFECTS ON VEGETATION

Rangeland Vegetation

As discussed under "Assumptions for Vegetation" in the draft document, management actions for livestock grazing and wildlife are the only actions that would have a material effect on the condition and trend of rangeland vegetation.

Under the proposed RMP, the vegetative resource would be managed to enhance livestock grazing while a balance would be maintained between commercial interests and management for the enhancement of wildlife habitat, watershed, and riparian vegetation. Vegetation condition would be improved on "I" category allotments through intensive grazing management. New AMPs would be developed and projects implemented in support of those AMPs.

The proposed RMP would result in an overall improvement of 5.2% in ecological condition in the Medicine Bow grazing EIS area in the long term. Changes in long-term condition and trend would be brought about by both short-term and long-term management actions. Projected long-term improvements in ecological condition and vegetation trend that would result from the management actions for the grazing EIS area are discussed below and are shown by allotment in table LVGR-AP-6 in the Livestock Grazing appendix to the draft RMP/EIS.

Existing trend would continue in "M" and "C" category allotments. There are management problems that are considered insignificant on an allotment basis within the "C" allotments. These should be monitored; however, they are not addressed in this narrative. They could be treated individually as opportunities arise. In the short and long terms, there would not be any great changes in the vegetation resource as compared to the existing situation.

Current levels of livestock grazing use would be continued until monitoring data could be collected. This would mean that management actions on "I" allotments would be deferred in the short term. In areas where the present management is considered unacceptable, problems such as improper distribution of livestock would continue. During the short term, while monitoring was being initiated, the vegetative vigor, vegetative production, seed production, and seedling establishment would continue in the present trend. Areas with declining trend would continue a downward trend, while areas with static or upward trend would continue in their respective directions. Ecological condition in areas with a downward trend would be stabilized in the long term from adjustments in livestock grazing use that could be made after monitoring. These adjustments would achieve sustained-yield utilization levels.

Management actions that would be implemented before collection of monitoring data could include allotment boundary fences, development of additional water sources, or prescribed burns or sprays. These actions all could be developed before and during monitoring in the hope that declining trends could be reversed or that stagnant, decadent vegetative communities could be improved.

Grazing systems or AMPs would be developed for intensive management of 13,140 acres of crucial winter range for big game to improve habitat condition. This would result in a slow improvement in ecological condition in these areas in the long term.

Ecological condition would be improved in the long term in some allotments through implementation of 55 AMPs and construction of projects in support of the AMPs. These actions would allow most plants to complete growth cycles and increase carbohydrate reserves, thus benefiting ecological condition and vegetation trend. The condition of all riparian vegetation in the "I" category allotments would be expected to improve as a result of these AMPs.

One of the main objectives of implementing AMPs is to increase available forage while improving vegetation condition and trend. Condition would be enhanced by improvement of ground cover, species composition, plant vigor, and density (Stoddart and Smith 1955). The rate of change in condition would vary depending upon site potential, present vegetation condition, present cover, natural seed sources, extent of range improvements, and climatic conditions (Stoddart and Smith 1955).

The physiological needs of management species would be met through implementation of the proposed AMPs and rangeland projects. The past practice of season-long grazing would be eliminated as grazing systems were implemented. Rest-rotation systems would promote vigor and seedling success of forage species by rest and deferment, promote seed planting of forage species by the mechanical action of animal movement following deferment, reduce ill effects of repeated overuse of preferred areas that commonly occur with continuous grazing, and

increase animal productivity as a consequence of increasing vegetation productivity (Hanley 1979).

Water developments and fencing would improve the distribution of livestock. Proper distribution of livestock is essential to effective use of the range (Cook 1967). As discussed above, uniform utilization of the range and rest during critical periods of growth can reduce the ill effects on forage plants from overgrazing and continuous season-long grazing. Improved livestock distribution would benefit ecological condition and vegetation trend.

The BLM would practice vegetation manipulation on 58,308 acres in the Medicine Bow grazing EIS area to obtain a desirable vegetation composition or to correct a range suitability problem such as lack of production. Vegetation manipulation could be conducted by burning or spraying, possibly followed by seeding. Most of the manipulation (95%) would involve eradication of sagebrush within the sagebrush vegetation type. The majority of the sagebrush control in the past 85 years has been by burning and spraying. Shrubs that do not sprout from the root, such as big sagebrush, sometimes can be completely eradicated by a single fire when there is adequate ground fuel or dry grass to carry the fire.

The response of the herbaceous vegetation after a fire depends on the type of herbaceous vegetation present before the fire, the intensity or temperature of the fire at ground level, the season of burning, and the phenological stage of growth at the time of burning. Significant increases in the production of the herbaceous species have been observed following wildfires within the grazing EIS area. Even though there have been no studies in the planning area to quantify the amount of increase of herbaceous species, estimates of 75% to 100% would be considered realistic.

Results of previous sagebrush eradication by spraying in the planning area have indicated up to 85% removal of big sagebrush, accompanied by an increase in the production of the herbaceous species. Increases in production of the herbaceous species can be attributed to the opening of the canopy and the availability of increased moisture (Stoddart, Smith, and Box 1975).

The increased production in the areas treated by vegetation manipulation would allow increased use by grazing animals. This would allow other heavily utilized areas to rest. Thus, the benefits to the vegetative community as a whole from vegetation manipulation would be derived mainly from reduced utilization levels on untreated areas.

Approximately 11,500 acres of degraded sites would be seeded under the proposed RMP. This action would establish desirable vegetation, which would lead to increased vegetative production and increased grazing capacities. It also would protect the soil from erosion and increase ground cover. Seedings, once established and used in conjunction with grazing systems, would provide the additional benefit of taking some of the grazing pressure off other highly productive native ranges.

Riparian Vegetation

A plan to protect and improve streams and critical riparian areas through fencing would improve the vegetation by increasing productivity, vigor, and seed production in the short and long terms. Approximately 67 acres of riparian vegetation would be improved by exclusion of livestock grazing. In addition, 1,658 more acres of riparian vegetation would be improved through the AMP process discussed above. Intensive management would increase the number of woody plants, improve stream bank condition, and increase the overall productivity of these sites.

Studies by Dahlem (1979) and Duff (1979) have shown that exclusion of livestock from riparian areas can result in noticeable improvement in riparian vegetation in a short time. As little as three to five years of exclusion may be all that is necessary for woody vegetation to reach heights that would adequately protect it from grazing and provide adequate stream bank cover and protection. These subirrigated sites would respond rapidly because of the large amount of moisture available. Once these areas improved, infrequent livestock grazing might be allowed as long as the riparian areas remained in good condition.

In the 1,658 acres to be improved through the AMP process, some rest from grazing would be provided through the use of grazing systems, seasonal use restrictions, and herding and through the development of alternate watering sources for livestock. This would increase plant production, vigor, and seed production in the long term. On some riparian areas, livestock might need to be excluded for several years to allow regeneration of the woody vegetative species (willows and cottonwoods). This action probably would be implemented only after other management practices had proved unacceptable. This could delay the improvement of some areas.

Existing riparian vegetation would be improved and new riparian vegetation could be created by the construction of reservoir fences to exclude livestock and piping of water to a trough outside the fence. Approximately 56 acres surrounding existing reservoirs could be improved in this

manner. The actual percentage of this area that would support riparian vegetation would depend on the fluctuation in water level in the reservoirs and on the characteristics of the soils and vegetation at each reservoir site. Any increase in riparian vegetation or improvement in existing riparian vegetation would benefit the vegetation resource.

Rare Plants

No effects on Gibben's beardtongue would be expected under the proposed plan because the known population is fenced and a trend study is in place. The proposed withdrawal would ensure that the area would not be disturbed by exploration and development of locatable minerals.

No effects on the population of persistent sepal yellowcress would be expected because of the BLM's efforts to coordinate with the Bureau of Reclamation in monitoring the population. The BLM also would coordinate with county weed and pest control districts on weed control proposals.

The Muddy Gap cushion plant community could possibly be affected by surface disturbance from ORV use, but the effect would not be likely to occur. The area could be disturbed by exploration and development of limestone deposits, but such disturbance is not considered likely since no claims have been filed on the area. The plant community would be monitored and additional protective measures would be taken if monitoring indicated a need. This would help to ensure continued protection of the community.

Overall Effects

Conclusion: Under the proposed RMP, ecological condition and vegetation trend would be expected to improve over the grazing EIS area as a whole. The improvement in ecological condition over the grazing EIS area would be 5.2%.

A total of 1,781 acres of riparian vegetation would improve slowly over the long term through intensive management practices under this alternative. This is 46% of approximately 3,911 acres of riparian vegetation in the Medicine Bow grazing EIS area.

Adverse effects on rare plants would not be expected to occur under the proposed plan.

EFFECTS ON VISUAL RESOURCES

The goal of visual resource management under the proposed RMP would be to minimize adverse effects on visual resources while maintaining the effectiveness of land-use allocations.

Surface disturbance from oil and gas activities would be restricted on 194,000 acres of VRM Class I and II areas. These are areas with high scenic values upon which development activity could have the most adverse impacts. Limitations on surface disturbance would help to preserve visual quality.

Development of the Hanna Basin coal area would have an adverse impact on visual resources. The effects would occur specifically along the west side, where the area abuts the North Platte arm of Seminoe Reservoir. This is part of a VRM Class II area and also a popular fishing area. While coal development would not affect fishing, the visual quality of the area would be reduced if the leases were developed down to the reservoir.

EFFECTS ON WILDLIFE AND FISHERIES

Introduction

The goal of the wildlife and fisheries program under the proposed RMP would be to continue present management actions under modified management plans. These plans would emphasize maintaining or improving wildlife habitat values and, where necessary, restricting conflicting activities that would jeopardize important habitat values or disturb species during critical periods. Typical impacts on wildlife from various types of activities are described in the Wildlife appendix to the draft RMP/EIS.

Effects from Management Actions for Various Programs

Forestry Actions

The level of harvest would be increased to 2,000 acres per decade under the proposed RMP. Short-term losses of big game habitat due to physical disturbance and human activity would be greater than under present management. This is because of the increase in human activity associated with roads at the proposed harvest level. The long-term effect on big game could be minimal if harvests were properly planned and executed.

Timber sale layout and timing would largely determine the degree of effects on elk habitat. Summer, fall, and calving ranges could be greatly affected in localized areas for a limited time, or the effects could be spread over a larger area on a continuing basis. For example, over the next ten years about 600 acres would be harvested on Shirley Mountain. Under one possible "scenario," these harvest areas could be concentrated in one portion of the mountain over a period of one or two years. Loss of security and calving cover and displacement of elk to other portions of the habitat would be great in the area of the harvest in the short term. Security cover would be affected in the harvest area for 10 to 20 years. As the harvested areas regenerated and harvest activity moved to different portions of the mountain, the habitat quality would return to preharvest levels. The area affected would move to different areas over the long term.

Under another possible harvest pattern, harvest areas would be small and spread more evenly over the mountain during the ten-year period. Although there would be fewer localized effects from any one harvest area, the effects would be spread over a larger area and would be continuing. Harvested areas would regenerate, but habitat quality would not return to preharvest levels because of the continuing influence of harvests nearby. Overall habitat quality of the area would decline over the long term. There would be similar effects on mule deer habitat, but to a lesser degree.

Forest stringer habitat in forest fringe areas provides edge, cover, and migrational corridors between summer and winter ranges for elk, deer, and other wildlife. Timber harvest in these areas would reduce the effectiveness of this habitat for 10 to 20 years in the area of the harvest. However, the harvested areas would regenerate and habitat quality would return to preharvest levels over the long term.

More than any other activity associated with timber harvest, the increase in roads could reduce habitat effectiveness for elk and mule deer. Although access roads would be closed after timber harvest, road closures can be difficult to implement effectively in open topography. If roads could not be closed effectively and additional roads developed, human presence could increase in harvested areas over the long term. This could cause elk, deer, and possibly bighorn sheep to establish avoidance zones. This, in addition to direct habitat loss from road construction, could amount to considerable long-term habitat loss for those species.

New roads that would be added for access to timber sales on Shirley Mountain are of great concern. Road density is already high in this area, and the topography is not conducive to effective road closures. Timber harvest would reduce elk security cover. There could be consequential adverse impacts on elk in this area from the combination of reduced security cover and the increased human activity associated with more roads. As a result, elk could be displaced to possibly suboptimal habitat, or their use of privately owned pastures and meadows near Shirley Mountain might increase.

If the layout and timing of timber sales were carefully planned and the effective closure of temporary roads ensured, timber sale activities would have minimal effects on big game habitat and could actually improve habitat in the long term. Overmature lodgepole pine trees that are ripe for beetle attack and wildfire would be replaced with vigorous young stands. The natural life cycle of lodgepole pine includes mortality from fire and from insect and disease infestations, as well as regeneration of a single age class of forest over large areas. Timber management activities could improve big game habitat by improving forest age-class diversity and distribution, edge effect, and forage community diversity.

In all timber sales, the needs of fish and wildlife would be considered so that habitat conditions could be maintained or improved. Limitation of clearcuts to 25 acres or less with irregular edges would help to ensure adequate cover for elk and deer. Effects on elk would be minimized if a 40% to 60% cover-to-forage ratio was maintained where possible and if roads were closed as soon as possible after the end of timber harvesting.

The harvesting of other wood products such as poles, firewood, and wildings is minimal at present, and it is expected to remain at the present level. This level would have a minimal effect on wildlife resources.

Forest management would be tailored specifically to benefit other identified resource values or uses on 85,228 acres of forestlands. This could include rejuvenation of decadent aspen stands by cutting, which would benefit fish, beaver, and accipiters.

Livestock Grazing Management Actions

The short-term benefits to the wildlife community under the proposed plan would be limited because of the monitoring period that would be required to determine the current range conditions. Initiation of intensive management actions would lead to earlier benefits where problems are known to exist—for example, severely degraded riparian areas; areas where there is competition for forage between livestock and big game; or crucial winter ranges with interspecific competition among elk, mule deer, and bighorn sheep.

Long-term effects on wildlife habitat from increased livestock numbers (or longer seasons of use) would vary between allotments, depending on the distribution of the livestock. Enhancement of wetland and riparian areas and protection of sensitive wildlife values would be emphasized, as would enhancement of livestock grazing.

If new range improvements on upland sites attracted livestock away from the high priority riparian habitats onto moderate or low priority habitat types, there would be important benefits to the wildlife communities.

Reduction or regulation of the use by ungulates of the riparian zones in "I" allotments would improve the existing situation by allowing plants to retain more vegetative matter as residual cover and to produce young growth successfully. Over a given time, vegetative structural diversity (and therefore wildlife diversity) would be maintained or improved as different age classes of woody plants matured. However, in other areas, continued levels of use in the bottoms would continue to impede improvement of riparian zones. Woody plant reproduction would not have the opportunity to replace old decadent plants, so there would be a long-term loss of the canopy species. As structural diversity of the vegetation declined, animal diversity also would decline.

Effects on big game animals from livestock grazing actions could be beneficial or detrimental, depending on the location of the range improvements in relation to the seasonal ranges. Changes in livestock distribution that would reduce forage competition on crucial winter ranges would be of great benefit to wildlife habitat even if livestock numbers increased.

It is not expected that increased habitat capacity would lead to increases in population objectives for herd management units. However, the WGFD could increase population objectives on the basis of consultation with grazing permittees, private landowners, and public land management agencies if habitat capacity increased. If this happened, increased economic benefits might be realized because of a subsequent increase in harvest level.

The overall effect on fisheries under the proposed RMP would be positive. A total of 41.5 miles of trout stream habitat in "I" category allotments in the Medicine Bow grazing EIS area would be maintained or improved. There is also good potential in this area for development of reservoirs of sufficient size to support stocked trout. Any changes in kind of livestock from sheep to cattle would be monitored and actions taken to maintain trout stream habitat.

In the area covered by the Divide RPS (there are no trout streams in the Seven Lakes area), some positive effects on up to 43.5 miles of trout stream habitat in "I" allotments would result from AMPs. No large new reservoirs would be likely in this area, and changes in kind of livestock from sheep to cattle could cause habitat degradation in some allotments.

Minerals Actions

Leasable Minerals—Coal

Introduction. It is projected that coal mining activities will disturb about 4,000 acres in the next 20 years, regardless of the amount of coal available. The effects on wildlife from this mining would depend a great extent on the location mined and the method of development.

Previous Analyses. Projected impacts on wildlife from some of the leased and unleased coal areas that are available for further lease consideration under the proposed RMP have been analyzed in detail in several EISs, as follows:

China Butte, Medicine Bow, Rosebud, Seminoe II, and Red Rim coal tracts: U.S., Department of the Interior, Bureau of Land Management, *Draft Green River-Hams Fork Regional Coal Environmental Impact Statement* (Craig, CO 1980).

Red Rim: U.S., Department of the Interior, Office of Surface Mining Reclamation and Enforcement, and Wyoming Department of Environmental Quality, Land Quality Division, *Draft Red Rim, Wyoming Petition Evaluation Document/Environmental Impact Statement* (n.p. 1983).

Carbon Basin: U.S., Department of the Interior, Bureau of Land Management, *Proposed Coal Leasing in Carbon Basin Area, Wyoming* (n.p. 1979).

Savery Preference Right Lease Application (PRLA) areas: U.S., Department of the Interior, Bureau of Land Management, *Savery Project Preference Right Coal Lease Applications: Draft Environmental Impact Statement* (Rawlins, WY 1982).

Indian Springs; Wild Horse Draw: U.S., Department of the Interior, Bureau of Land Management, *Green River-Hams Fork Coal Region: Round Two Draft Environmental Impact Statement* (Craig, CO 1983).

The following is an overview of the results of the analyses cited above.

Should coal development activity increase in the areas mentioned, industrial and urban development and known population growth in the region would have the most pervasive adverse cumulative effects on wildlife. Impacts resulting from this development and growth are discussed in the section on typical impacts on wildlife from coal activity in the Wildlife appendix to the draft EIS. With an increase in growth and development, secondary wildlife impacts would increase.

The mine sites alone would have minimal effects on regional pronghorn and mule deer populations. This is largely because little crucial winter range would be affected and because the coal areas are spread over several big game management units. There could be consequential local adverse effects on crucial winter range in some areas. Development of coal in the Red Rim area would have the greatest potential for such effects.

The regional elk population (Baggs elk herd) could be affected by development of the Savery PRLA areas, depending on the degree of mitigation and its effectiveness. The draft Savery EIS (USDI, BLM 1982) discusses these impacts. Addition of a development "scenario" would depend on the final showing of economic feasibility within mitigative constraints.

Impacts on sage grouse would be localized. Regional impacts resulting from the mining operations alone would be minimal. Most habitats that would be altered are moderate or low priority habitats. Alteration of the low to moderate priority habitats would be considered inconsequential.

The cumulative effects that mining would have on raptors are not entirely clear, but they would be largely negative if nesting sites were destroyed, if prey bases were eliminated by surface disturbance or vegetation removal, or if birds were incidentally killed by mining operations. Highwalls left after mining in the Hanna Basin have been shown to benefit golden eagles by increasing limited nesting substrates. However, the Surface Mining Control and Reclamation Act (SMCRA) normally requires reclamation of highwalls. What effect mining would have on prairie falcons and ferruginous hawks is not clear.

A total of 15,495 acres of habitat has been altered in the Hanna Basin, with 6,176 acres reclaimed.

It is difficult to determine a cause and effect relationship between mining activity and effects on wildlife in the Hanna Basin. Wildlife populations fluctuate, sometimes widely, in response to natural factors such as cycles in the abundance of prey base or extremes in seasonal weather (for example, severe winters). Without a control treatment, it is not feasible to separate the impacts on wildlife resulting from mining from the impacts caused by natural factors.

Overall wildlife impacts at a given mine site would be determined by the premining values and by what species the reclaimed area would support. These factors would vary from site to site and would depend on which species and habitat the land manager wanted to manage for.

Effects in Areas Not Previously Analyzed. The effects of coal development in some areas have not been analyzed in earlier coal documents. Those areas are discussed below.

Indian Springs and North Indian Springs Coal Areas. Most of the public land in the North Indian Springs area falls into the moderate priority habitat category. Vegetation communities on BLM-managed public land in the area are sagebrush/mixed grass steppe, big sagebrush/rabbitbrush steppe, saltbush steppe, badland, and rockland.

This area adjoins the Indian Springs coal area on the north. The following discussion applies to both areas.

Under a current proposal, the Indian Springs underground coal gasification project (in situ operation) would be limited to approximately 1 square mile of private land during the next ten years. Previous small-scale operations have had few impacts on wildlife, and few impacts would be expected from the expanded experimental operations over the next ten years.

Depending on the feasibility results of the ten-year project, full-scale commercial operations could take place over the subsequent ten years. Production would be expanded northward through a major portion of the Shamrock Hills raptor concentration area. An undetermined amount of public land would be involved in the project.

There are 6,340 acres of public land within the boundaries of the two coal areas. Approximately 6,000 acres of public land in the two areas are crucial winter range for the Red Desert antelope herd. Surface disturbance would include an upgraded gravel road, access roads to wells and along pipelines, and aboveground pipelines that would run northward along the coal seam through the raptor concentration area. Three to four injection/production modules would be operating at any one time; they would be moved northward along the coal seam as extractable coal was exhausted. In addition, there would be a production processing facility for the modules and a commercial manufacturing facility.

Effects on pronghorn would include loss of habitat until disturbances from pipelines, wells, access roads, and other facilities were rehabilitated. The loss of habitat would vary from 3 to 20 years, depending on the length of time the facilities were in place and the time needed for reclamation. The amount of crucial habitat disturbance would depend on placement of facilities, locations of wells and pipelines, and locations of roads for access to these facilities. Increased harassment and illegal kills could result from increased access and human visitation.

In the short term, adverse impacts on raptor production probably would be kept below a detrimental level by adherence to the committed mitigation that was arrived at through the review of the coal unsuitability criteria. The objective of this committed mitigation is to maintain productivity of raptors within the Shamrock Hills RCA.

Noise and human presence in the area would be expected to have the most consequential adverse effects on nesting raptors. With adherence to the committed mitigative measures, the adverse effects would be localized and minor in the short term.

In the long term, the cumulative adverse effects of surface disturbance, noise and human presence might reach a level that would jeopardize the integrity of the raptor concentration area. This could possibly result in reduced productivity—the results of such disruption are debatable. It is not known whether the committed mitigative measures are adequate to achieve the objective of maintaining raptor productivity in the raptor concentration area. Data are insufficient to assess the cumulative effects of this project on raptors effectively and confidently.

Atlantic Rim Coal Area. Effects on wildlife habitat from surface mining in the Atlantic Rim coal area would vary, depending on the "scenario" of the particular mining plan adopted. Mitigative measures for this area were recommended in the Little Snake River KRCRA Elk Study (Ward 1985). All but one of those measures would be required as lease conditions (see the Coal appendix).

In the following analysis for Atlantic Rim, the "scenario" presented represents a maximum level of development that could occur within environmental constraints. It should be kept in mind that no mining scenario has been adopted, and there are many possible scenarios that would result in varied impacts.

Mining on Atlantic Rim would include four pits (three south of Jep Canyon and one north of Jep Canyon) totaling 1,889 acres. Approximately 60 to 80 acres per year would be mined in the northern pit and one of the southern pits concurrently. Mining would be done on the westernmost slopes; however, mining activity and disturbance would not be allowed in Jep Canyon, Snowshoe Canyon, and Hay Gulch. As stated previously, all recommended mitigation (Ward 1985) would be applied except the recommendation that mining be restricted to one pit at a time. Approximately 770 additional acres of sagebrush-mixed grass steppe habitat type would be disturbed for surface and transportation facilities during the first year of operation.

The Atlantic Rim area comprises a complex mosaic of nine diverse vegetation communities: greasewood-sagebrush riparian shrubland, short grassland, sagebrush-mixed grass steppe, big sagebrush-rabbitbrush steppe, quaking aspen, mountain shrubland, willow-waterbirch riparian shrubland, riparian grassland, and open aquatic-emergent grassland. The last five communities named are high-priority habitat types for wildlife. At least six of these communities would be disrupted during or throughout the life of the mine; the last three listed would not be affected by mining operations and disturbance.

Additionally, there would be a loss of "edge effect" as various vegetation communities were mined or disturbed. An estimated total of one-fourth to one-third of the mining area (472 to 630 acres) is rated high priority wildlife habitat. This is a substantially greater amount of high priority habitat than on other surface mines or potential coal development areas in the Rawlins District.

Reclamation would be progressive, proceeding concurrently with mining operations. As mining was completed in one portion of an area to be mined, reclamation would begin in that portion while mining operations proceeded to the next portion. The reclaimed land would be stabilized in a few years and available for use. Full restoration of the land and its vegetation to the premining condition would require a longer time. Although the area would be reclaimed, it is questionable whether the complex mosaic of the current vege-

tation types could be restored. Reclamation practices, hydrologic impacts, and postmining soil characteristics would determine the vegetation that could be supported for postmining use.

It may be completely unreasonable to assume that postmining conditions would support premining vegetative composition and densities. Cool season grasses are relatively easy to reestablish. Reestablishment of sagebrush, mountain shrub, and aspen types is much more difficult. If the complex mosaic of the current vegetation types could not be restored, there would be irreversible and irretrievable adverse impacts on the 100 wildlife species that are supported by this habitat. The habitat could be lost.

Open-pit mining in the Atlantic Rim area could disrupt up to an estimated total of 2,300 acres of crucial winter range for elk over the life of the mine. This is approximately 3% of the total Baggs crucial winter range for elk. Although the percentage appears small, the Atlantic Rim area, including the estimated 2,300 acres that would be disrupted, constitutes an extremely important part of the winter range.

During the severest winters, such as the one that occurred in 1983-84, the Atlantic Rim area supports 600 elk. These elk are 75% of all the elk using the north end of the Little Snake River known recoverable coal resource area (KRCRA) for winter range, and 30% of all the elk wintering on both the north and south ends of the KRCRA in Wyoming. Since elk use in this area increases with greater snow accumulation and more severe weather, impacts from habitat disruption become more pronounced in tougher winters. During normal winters, approximately 200 to 250 elk winter in the Atlantic Rim area, and use is less concentrated.

Disruption of habitat caused by mining activities and disturbance creates additional habitat loss through the creation of avoidance zones. The harassment of resident and migrant elk during coal mining would be expected to displace elk as far as 2 miles during the first year or two (Ward 1985). Information from studies in Idaho (Kuck 1984) and Colorado (Johnson 1985) show that elk will make adjustments in response to the human activities associated with mining and that the area of influence could be expected to be reduced to less than 0.25 mile within a few years if harassment directed at elk was controlled.

The applicability of those study results is severely limited, however, in that the wintering elk on Atlantic Rim use topographic features rather than trees to satisfy their requirements for thermal cover and security cover. This could result in greater long-term displacement distances than was indicated in the Idaho and Colorado studies. With mining, elk use would be expected to be concentrated more on the north end of Atlantic Rim, especially during more severe winters.

The severity of impacts on wintering elk on Atlantic Rim would depend on the severity of the winter and application of the recommended mitigative measures. During normal or light winters, elk displacement would be more likely to be to the south. Mitigative measures that would reduce competition with cattle for forage would substantially reduce the impact of displacement. Impacts on elk displaced from Atlantic Rim would be further minimized by habitat improvements to increase the quality and quantity of forage and cover on elk crucial winter range to the south of Atlantic Rim.

Any mining activity or disturbance that would inhibit movement to the north end of Atlantic Rim during severe winters would place additional hardships and stress on animals in negative energy balances. However, the committed mitigation would prevent inhibition of movement along the rim; thus, the effects of mining on elk during severe winters would be minimal.

Disturbance and probable long-term loss of the aspen communities within the mining area would be detrimental to the 40 to 100 resident elk that use this community type as primary thermal and hiding cover during summer and fall. Because of the potential effects in these areas, aspen patches in the major drainages would be protected from disturbance by mining or related support facilities (see the Coal appendix to this EIS). Resident elk might be displaced to adjacent aspen communities that may be less desirable, but the effects on the elk would be minimal.

As many as 200 to 300 summering and 50 wintering mule deer would be adversely affected by disrupted habitat and human disturbances. Animal distributions probably would be strongly influenced by mining activities. However, deer are less sensitive to disturbance than elk; thus, displacement would be considerably less and habituation much more likely. Of particular benefit to mule deer would be avoidance of mountain shrub and aspen communities by mining operations. Successful reclamation of these communities is unlikely, so if mining operations did not avoid them, there would be an irreversible and irretrievable loss of habitat.

Some sage grouse nesting habitat would be disrupted by mining in the Atlantic Rim area. In addition, the strutting ground in section 23, T. 19 N., R. 90 W. could be adversely affected by roads and railroads. While impacts could be locally detrimental, overall effects on the sage grouse population would be negligible.

In the short term, mining could cause nest abandonment for one pair of golden eagles and one pair of prairie falcons. According to raptor inves-

tigations conducted in the Hanna Basin coal tracts, leaving suitable highwalls after mining provides nesting substrates. If such highwalls were left in the Atlantic Rim area, golden eagles and prairie falcons could benefit from the resulting nesting substrates.

Coal mining could cause a pair of goshawks and 30% of the known active Cooper's hawks nesting in the resource area to abandon their nests. This could be a highly consequential loss of limited suitable nesting structures for accipiters. Disturbance of aspen communities would be particularly detrimental to accipiters; it would constitute an irreversible and irretrievable loss of nesting and hunting habitat.

Mountain shrub, willow-riparian, and aspen habitat types are structurally diverse types important to small mammals and numerous bird species. Mine operations would result in a loss of a considerable amount of mountain shrub habitat. Consequently, animals using this habitat type would be displaced or lost. Since reestablishment of the premining habitat mosaic is unlikely in the mined areas, postmining wildlife species would be greatly reduced. Mine operations should not affect willow-riparian and aspen habitat because the major drainages where these habitats are found would not be mined, and sediment flow would be contained.

If Atlantic Rim and the Savery PRLA areas were mined at the same time, there would be detrimental cumulative effects on elk because habitat loss and herd harassment would be greater than if the areas were mined at different times.

Leasable Minerals—Oil and Gas

Under the proposed RMP, five million acres would be open to oil and gas leasing with application of the Wyoming BLM standard mitigation guidelines. Riparian areas, sage grouse strutting grounds, sharp-tailed grouse dancing grounds, and known habitat for threatened or endangered species would be protected from surface disturbance.

Seasonal restrictions during critical periods would eliminate stress, disturbance, and displacement caused by oil and gas activities. This would protect big game on crucial winter ranges, elk on calving areas, sage grouse and sharp-tailed grouse in nesting habitat, and raptors during the nesting period. Seasonal restrictions during critical periods also might help to reduce mortality, ensure reproductive success and survival of young, and reduce conflicts with owners of adjacent property that could be caused by displaced animals. These restrictions would not be in effect during periods other than those requiring special protection. Should production be established or field development become a reality, physical loss of habitat and the creation of avoidance zones could cause long-term detrimental impacts on big game, raptors, and other wildlife species.

The Wyoming BLM standard mitigation guidelines would be applied to the raptor concentration areas to maintain their value to nesting raptors. A total of 36,600 acres in three raptor concentration areas (Atlantic Rim, Seminoe, and Shamrock Hills) also would be designated ACECs. This would further focus management toward the maintenance of these important nesting areas (see map 8).

Surface disturbance within the Baggs elk crucial winter range and overlapping big game crucial winter ranges would be spatially and temporally managed to maintain the habitat quality.

Fisheries, steep slopes, and riparian areas would be protected from surface disturbance. This would reduce the possibility of alteration or loss of habitat for fish, waterfowl, game birds, beaver, big game, a wide variety of birds, and other animals. The high priority standard habitat sites associated with riparian areas and steep slopes also would be protected from oil and gas disturbances. These actions would protect 140,900 acres (3% of the wildlife habitat in the planning area).

Prairie dog colonies have not been thoroughly inventoried in the planning area. Prairie dog colonies not previously located probably would be found during the processing of each application for permit to drill (APD). Black-footed ferret searches would then be completed before any surface disturbance could begin. This would prevent potential adverse effects on black-footed ferrets.

Some important and crucial wildlife habitats overlap known geological structure (KGS) areas and areas of high and moderate oil and gas potential. Table 13 indicates the extent of overlap of big game, sage grouse, and raptor habitat with such oil and gas areas.

Consideration of overlapping areas on table 13 indicates that habitat losses caused by oil and gas activities could have the following impacts on wildlife in the planning area over the next 25 years:

- Significant long-term adverse effects on raptor populations and the Baggs elk and mule deer herds
- Negative long-term effects on antelope herds in the Ferris-Seminoe and Jelm Mountain areas
- Minimal long-term effects on sage grouse populations

TABLE 13

ACREAGE OF BLM-ADMINISTERED PUBLIC LAND IN HIGH IMPORTANCE WILDLIFE HABITATS OVERLAPPING AREAS WITH OIL AND GAS POTENTIAL

HMP Areas	Crucial Elk Winter Range	Elk Calving Range	Crucial Mule Deer Winter Range	Crucial Antelope Winter Range	Bighorn Sheep Winter Range	Breeding/Nesting Area[1] Acreage (Number of Leks)	Raptor Nesting Concentration Areas[2]
Known Geologic Structures							
Baggs	2,640		26,800	25,800		26,900 (6)	22,900
Ferris/Seminoe			2,240	10,500		7,000 (0)	250
Shirley Mountain			130	320			
Sage Creek Basin						300 (0)	640
Encampment Bighorn Sheep							
Red Desert				1,900		89,000 (14)	
South Desert[3]			19,800	70,500		85,100 (16)	14,740
Saratoga Valley[3]			200	1,700		3,120 (2)	
Laramie Peak[3]							
Jelm Mountain[3]				130			
Other						680 (0)	200
TOTAL	**2,640**		**44,170**	**110,850**		**212,100 (38)**	**38,730**
High Potential Oil and Gas Areas							
Baggs	21,280		25,200	21,000		43,600 (14)	7,220
Ferris/Seminoe			2,250	14,360		27,600 (6)	300
Shirley Mountain			3,500	3,200		4,920 (2)	
Sage Creek Basin						2,400 (1)	2,120
Encampment Bighorn Sheep							
Red Desert				7,900		50,100 (8)	
South Desert[3]			36,700	1,800			
Saratoga Valley[3]			2,400	10,100		6,040 (0)	
Laramie Peak[3]							
Jelm Mountain[3]				500			
Other						320 (0)	
TOTAL	**21,280**		**70,050**	**58,860**		**134,980 (31)**	**9,640**

TABLE 13 (Continued)

ACREAGE OF BLM-ADMINISTERED PUBLIC LAND IN HIGH IMPORTANCE WILDLIFE HABITATS OVERLAPPING AREAS WITH OIL AND GAS POTENTIAL

HMP Areas	Crucial Elk Winter Range	Elk Calving Range	Crucial Mule Deer Winter Range	Crucial Antelope Winter Range	Bighorn Sheep Winter Range	Breeding/Nesting Area[1] Acreage (Number of Leks)	Raptor Nesting Concentration Areas[2]
Moderate Potential Oil and Gas Areas							
Baggs	54,800	1,800	17,200	3,400		58,240 (16)	8,680
Ferris/Seminoe			15,500	32,740	2,720	30,720 (7)	21,250
Shirley Mountain	7,800		20,800	66,700		57,760 (10)	
Sage Creek Basin			3,100			9,700 (1)	8,460
Encampment Bighorn Sheep							
Red Desert				36,900		31,400 (4)	17,280
South Desert[3]			1,100				
Saratoga Valley[3]	3,300		23,800	38,250		94,880 (20)	5,440
Laramie Peak[3]				4,500		8,520 (2)	
Jelm Mountain	3,400	1,240	950	16,800		3,360 (1)	
Other			5,000			1,900 (0)	
TOTAL	**69,300**	**3,040**	**87,450**	**199,290**	**2,720**	**296,480 (61)**	**61,110**

[1] Includes known habitat and areas believed to be habitat for sage grouse or sharp-tailed grouse.

[2] Does not include isolated nests.

[3] Proposed HMP area.

Locatable Minerals

Plans of Operations. Plans of operations for surface disturbance related to locatable minerals would be required on 27,500 acres of raptor concentration areas that would be designated ACECs. This would ensure consideration of raptor habitat in the two most important raptor concentration areas, Shamrock Hills and Seminoe.

Plans of operations required on the 1,760-acre Como Bluff proposed ACEC would include consideration of wildlife values; therefore, there could be fewer adverse effects on antelope on 1,760 acres of crucial winter range because habitat values would be maintained.

In the 8,300-acre Sand Hills proposed ACEC, plans of operations also would be required. This requirement would control and mitigate surface disturbance and physiological disturbance of wildlife on crucial and important habitat. Adverse effects could be minimized for mule deer, elk, sage grouse, and a variety of other species.

Plans of operations also would be required in the 13,320-acre Jep Canyon proposed ACEC. This would ensure consideration of raptor habitat and elk crucial winter range in this important area.

Withdrawals. Approximately 83,029 acres would be withdrawn from locatable mineral activities under this alternative. This total includes 81,489 acres of existing withdrawals and 1,540 acres of new withdrawals. This means that 819,971 acres more will be open to locatable mineral location than under present management.

The 41,245 acres of public water reserve withdrawals would be revoked; thus, these areas would be open to nonmetalliferous mineral location. This would increase the potential for long-term adverse impacts on riparian habitat in specific areas, and thus on a variety of wildlife and fish species.

The 564,758-acre withdrawal for oil shale development (South Desert HMP area) would be revoked.

Continuation of the withdrawal of 73,290 acres from mineral location by the Bureau of Reclamation would protect wildlife species from surface disturbance. Most of these withdrawals are along Pathfinder and Seminoe reservoirs, and they contain approximately 8,120 acres of crucial winter range for mule deer and antelope. Bald eagles that use this area would benefit in the long term because winter hunting and scavenging areas for this endangered species would remain undisturbed, as would the perching and nesting habitat (cottonwoods) along the North Platte River between Pathfinder and Seminoe reservoirs.

Potential Effects from Locatable Minerals Activities. The effects that can be expected from locatable minerals activities are discussed in the following sections.

Uranium. Uranium exploration and assessment are limited in the planning area, with production occurring at a slow rate and only in Shirley Basin. A market turnaround would be required for significant development to occur, and this is not expected through the mid-1990s. On the basis of this projection, it is expected that adverse impacts on wildlife through habitat disturbance from uranium activity would be localized and minor.

We cannot accurately predict when, where, or how much uranium development will take place in any given part of the planning area. However, known deposits of uranium ore lie in areas that are important to wildlife populations, and development of that ore could adversely affect wildlife habitat. Under current market conditions and production projections, adverse impacts would be minimal. If conditions should change and production accelerate, wildlife could be adversely affected. The following paragraphs describe areas where adverse effects could occur.

If uranium activity increased, production from the uranium ore body in the Ketchum Buttes area could have long-term impacts on the Battle Mountain elk herd. Approximately 1,280 acres of crucial winter range for elk could be adversely affected by surface disturbance, and human activity could create avoidance zones over a considerably larger area. Development of an ore body southwest of Red Rim could adversely affect crucial winter range for antelope; however, the amount of range involved would be minimal.

Historic disturbance of habitat by uranium mining in Shirley Basin over the past 31 years is estimated at roughly 7,000 acres. A substantial amount of this habitat has been reclaimed. Except for riparian habitat, no crucial or important wildlife use areas (such as crucial winter range or raptor concentration areas) have been lost as a result of this development.

It is estimated that as much as 100,000 more acres in Shirley Basin contain developable uranium. The area containing uranium overlaps 11,000 acres of sage grouse breeding/nesting habitat.

Environmental Consequences

A potential WGFD program to reintroduce black-footed ferret to sites in the Shirley Basin would not be affected by future uranium mining.

The Red Desert area contains nine potential areas for uranium mining comprising an estimated total of 50,000 acres. Historic activity has involved only one mine and less than 3,000 acres of habitat disturbance. The mine is now on standby; it might possibly be reopened if market conditions improved. The entire 50,000 acres is summer or winter/yearlong range for antelope, and 14,800 acres of that also is sage grouse breeding/nesting habitat.

No uranium production is occurring at present in the Poison Basin area west of Baggs, but resumption of mining in the near future is a real possibility. Previous mining was not on a large scale, and adverse impacts on wildlife were minimal. If extensive uranium mining should occur in this area, sage grouse, antelope, and mule deer could be affected. The potential mining area overlaps as much as 17,920 acres of sage grouse breeding/nesting habitat, 8,900 acres of crucial winter range for antelope, and 18,300 acres of crucial winter range for mule deer. Cumulative adverse impacts on mule deer also could occur from the combination of uranium mining and oil and gas development.

Metallic Minerals. Little mining activity, if any, for metallic minerals is occurring in the planning area. Some exploration and assessment are occurring at a low level, but there are no development plans because of market conditions.

We cannot accurately predict when, where, or how much metallic mineral development will take place in any given part of the planning area. However, known areas of metallic mineral occurrences lie in areas that are important to wildlife populations, and development of those minerals could adversely affect wildlife habitat. Locatable mineral occurrences are shown on map 27 in the draft RMP/EIS. The following paragraphs describe areas where adverse effects could occur.

The Bradley Peak and eastern Ferris Mountains area contains about 640 acres of crucial winter range for mule deer that could be adversely affected. Sage grouse nesting in the same area also could be affected.

If development should occur in the area south of Encampment, there could be adverse impacts on elk, mule deer, and bighorn sheep. The area contains crucial winter range that could be affected—up to 2,075 acres for elk, 960 acres for mule deer, and 3,000 acres for bighorn sheep.

The Jelm Mountain area is considered to have good potential for gold production. Metallic mineral mining in that area could have long-term adverse impacts on elk and mule deer. The potential mining area overlaps 450 acres of elk calving habitat and 380 acres of crucial winter range for mule deer.

Revocation of the 810-acre withdrawal on Bennett Peak would open areas of elk, mule deer, and bighorn sheep crucial winter ranges that are now closed. If extensive mineral exploration and mining should occur in those areas, the resulting surface disturbance and human activity could have long-term adverse impacts on these species.

Bentonite. There is a low to moderate potential for bentonite mining near and north of Medicine Bow. If bentonite should be mined in this area, it could result in long-term adverse impacts on sage grouse and antelope. The area contains as much as 5,600 acres of crucial winter range for antelope and 3,000 acres of sage grouse breeding/nesting habitat.

A potential WGFD program to reintroduce the black-footed ferret in sites southeast of Medicine Bow could be adversely affected if bentonite should be mined in that area. The Medicine Bow area has a lower potential for ferret reintroduction than Shirley Basin because of biological, political, and landownership considerations. Bentonite mining could destroy existing prairie dog colonies and eliminate the habitat, thus removing the area from consideration in the recovery process for black-footed ferrets.

Recreation Management Actions

In the proposed Dune Ponds cooperative management area, ORV use would be limited to open sand areas west of Carbon County road 351 and existing roads and trails in the remainder of the area. Rehabilitation or mitigation would be carried out in specific problem areas. The area is already used intensively for ORV recreation; thus, the designation would not cause any additional adverse impacts on wildlife. On the contrary, if this area was officially opened to ORV use, adverse effects on nearby nesting and staging habitat for waterfowl might be reduced because ORV use would be concentrated in the officially "open" area. In addition, rehabilitation in specific areas could improve wildlife habitat in the Dune Ponds area. Therefore, opening the specified area to ORV use would benefit important riparian/wetland habitat values.

In the Sand Hills area, ORV use would be restricted to existing roads and trails; however, rehabilitation and mitigative measures would be carried out in specific problem areas. This would have a positive effect on elk and mule deer on crucial winter range as compared to present management. Stress and disturbance during the critical winter period would be reduced, as would the disruption of travel corridors and migration routes. This would be particularly important for elk. This positive effect would be much less than under management options that would limit ORV use to designated roads and trails.

Restrictions on ORVs would reduce stress, disturbance, and physical habitat loss; however, where oil, gas, and mineral potentials are moderate or higher, restrictions would be of limited value to the wildlife resource in the long term. As the number of new roads continued to proliferate in association with energy and mineral exploration and development activities, these new roads then would qualify as existing roads. Thus, the value to wildlife from ORV restrictions depends on current energy and mineral development as well as on the potential for such development. Where potentials are low, the restriction would help protect habitat and wildlife during critical life cycle periods such as winter for big game and spring and summer for nesting raptors.

Wildlife and Fisheries Management Actions

The number of acres or miles on which wildlife habitat management actions would be carried out and the HMP areas in which these actions would be planned are described in chapter 2 under "The Proposed Plan." These management actions would provide long-term benefits to a wide variety of fish and wildlife species.

A total of 122,000 additional acres of high priority wildlife habitat would receive special emphasis for maintenance or improvement. This would minimize losses or degradation of high-value habitat for a wide variety of game and nongame species.

A total of 36,600 acres in three raptor concentration areas (Atlantic Rim, Seminoe, and Shamrock Hills) would be designated ACECs. In the proposed ACECs, plans of operations would be required for all locatable mineral activities that would cause surface disturbance, and intensive spatial and temporal management of disturbance would be applied to reduce adverse effects on nesting raptors and their habitat.

In the other raptor concentration areas that would not be designated ACECs (80,960 acres), the focus on maintaining the integrity of nesting habitat would be less clear and intense. The Wyoming BLM standard mitigation guidelines would protect the birds from disturbance during breeding/nesting activities. This would mean there would be fewer adverse impacts on raptor populations than under present management. Plans of operations would be required for locatable minerals activities that would cause surface disturbance of more than 5 acres.

With the northern part of the Baggs elk crucial winter range included in the 13,320-acre Jep Canyon proposed ACEC, that area would receive additional management emphasis. Spatial and temporal management of disturbance in the entire crucial winter range would help to maintain the integrity of the crucial winter range and survival of the elk herd. On 271,500 additional acres of crucial winter range for big game, surface disturbance would be intensively mitigated to restore and/or replace lost habitat. This would reduce long-term adverse effects on big game species.

The Sand Hills area would be designated an ACEC with spatial and temporal management of disturbance. Adverse effects would be reduced on crucial winter range for elk and mule deer and on the fragile ecosystem in general. ORV use would be limited to existing roads and trails. Some problem areas such as blowouts would be reclaimed. This reclamation would improve wildlife habitat in specific areas. However, it would not offset the long-term detrimental effects on elk and mule deer that could be expected as new roads were authorized, increasing ORV use. See the Wildlife appendix to the draft EIS for further explanation of the effect of ORV limitations.

The proposed Dune Ponds cooperative management area would receive special management attention with rehabilitation or mitigation in specific problem areas, while the needs of ORV users would be provided for. Long-term benefits would be realized by fisheries, waterfowl, and a variety of other wildlife species through reduced disturbance and habitat improvement.

The 12-acre white pelican colonial nesting island would not be designated an ACEC. The population would be monitored for disturbance and habitat change. The BLM would pursue a cooperative agreement with the Bureau of Reclamation and the WGFD for management of the island. Under a cooperative agreement, the agencies could implement actions that would protect the colony and its habitat from disturbance. This would help to ensure the continued viability of the nesting colony.

Conclusions: Under the proposed RMP, impacts on wildlife from forestry management actions would be greater in the short term than under present management. Because of the greater

volume of harvest, short-term adverse impacts associated with roads and increased human activity would be greater for big game and other wildlife species. The combination of reduced elk security cover on Shirley Mountain and increased human activity associated with roads could cause a consequential adverse effect on elk. In the long term, maintenance of important habitat values would be ensured by application of forest wildlife habitat guidelines and by maintenance of forest age class and habitat diversity.

Effects on wildlife from livestock grazing management actions would vary among allotments and could be either adverse or beneficial, depending on the effect of range improvements on livestock distribution. However, benefits would be realized by a variety of species from added emphasis on enhancement of wetland/riparian areas.

The overall effects of livestock grazing management on fisheries would be neutral over the planning area as a whole.

Cumulative impacts related to energy development could require adjustment to lower grazing capacities and thus to reduced big game population objectives. Mining on Atlantic Rim would disturb high priority habitat types. However, the committed mitigations listed in the Coal appendix would minimize these effects.

Application of the Wyoming BLM standard mitigation guidelines and spatial and temporal management of surface disturbance in key wildlife habitat areas would minimize effects on the important habitats in these areas.

Seasonal stipulations or restrictions requiring no surface disturbance would protect fish, waterfowl, game birds, beaver, big game, raptors, and a variety of other animals during critical periods. However, these restrictions would not prevent long-term adverse impacts on raptors and big game that could be caused by losses of important habitat during unrestricted periods.

If market conditions for uranium improved, uranium mining could cause long-term adverse effects on the Baggs elk herd; mule deer, sage grouse, and antelope in the south desert area west of Baggs; sage grouse in the Shirley Basin area; and sage grouse and antelope in the Red Desert area.

Metallic mineral exploration and mining could have adverse impacts on mule deer in the Ferris-Seminoe area and on elk, mule deer, and bighorn sheep in the Encampment area.

Bentonite mining could cause long-term adverse effects on sage grouse and antelope in the vicinity of Medicine Bow. A potential black-footed ferret reintroduction site south of Medicine Bow could be eliminated.

In areas where oil and gas potential is low, ORV management actions limiting use to existing roads and trails would benefit wildlife species such as big game and raptors during critical periods by reducing the potential for disturbance. In areas of moderate or higher oil and gas potential, this restriction would be of limited long-term value because roads qualifying for use would continue to proliferate.

The Shamrock Hills and Seminoe raptor concentration areas and a portion of the Atlantic Rim RCA would be designated ACECs with emphasis on spatial or temporal management of disturbance. All other RCAs would be managed spatially and/or temporally to minimize disturbance. Plans of operation would be required for locatable mineral location in the RCAs designated as ACECs. This would reduce cumulative adverse impacts on nesting raptors. Disruption of the integrity of these important nesting areas and physiological disturbance of nesting pairs would be reduced.

Potential adverse effects on the Baggs elk herd would be minimized through spatial and temporal management of disturbance.

The Sand Hills area would be managed under an ACEC designation. Mule deer, elk, and other species would benefit from spatial and temporal management of disturbance related to oil and gas development and locatable mineral location. However, ORV use would continue to be allowed on existing roads and trails, and this could result in cumulative adverse effects for wildlife should the number of roads increase over time.

The continued viability of the nesting colony of white pelicans would be enhanced.

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Chapter Five

Consultation and Coordination

PUBLIC PARTICIPATION

Public participation during early parts of the RMP process are described in the draft RMP/EIS. Public participation since publication of that document is described in this section.

Availability of the draft RMP/EIS for review and comment was announced through a notice published in the *Federal Register* on June 19, 1987, a news release issued at the same time, and letters to everyone on the Medicine Bow-Divide mailing list. These notices and letters also announced the public hearings scheduled for August 1987.

The BLM received a total of 175 letters on the draft document. In addition, oral comments about the RMP/EIS were made at a public hearing in Rawlins and at a meeting of the Rawlins District Grazing Advisory Council. These comments and the BLM's responses appear later in this chapter.

A total of 28 people attended formal hearings in Rawlins (August 11, 1987) and Laramie (August 12). In addition, three people attended a public meeting in Baggs on August 5.

The BLM, the WGFD, the U.S. Fish and Wildlife Service (USFWS), the National Wildlife Federation, the Wyoming Wildlife Federation, and the Rocky Mountain Energy Company attended a series of meetings to determine the stipulations and restrictions, if any, that should apply to coal mining in the Atlantic Rim area. The conclusions reached by this group are presented in the Coal appendix to this document under the discussion of unsuitability criterion 15 for the Atlantic Rim area. The BLM will coordinate with WGFD, USFWS, the National Wildlife Federation, and the Wyoming Wildlife Federation on further definition of the stipulations to be applied in that area.

There have been numerous other formal and informal meetings with members of the public to discuss the RMP. Records of these meetings are being maintained in the Great Divide Resource Area office.

The BLM prepared a biological assessment for threatened and endangered species and presented it to the USFWS as required by section 7 of the Endangered Species Act of 1973, as amended. The USFWS finding was "no effect" on the listed species. A copy of the biological assessment is on file in the Great Divide Resource Area office. A copy of the USFWS biological opinion memorandum is reproduced in the public comments section of this document.

COORDINATION AND CONSULTATION

Coordination

Coordination with other agencies and consistency with other plans was accomplished through ongoing communication and cooperative efforts between the BLM and involved federal, state, and local agencies and organizations.

The Wyoming Governor's Clearinghouse was supplied with numerous copies of this draft document for review to ensure consistency with the state's ongoing plans. The RMP team has reviewed county land-use plans to ensure consistency. The BLM also has coordinated with Bureau of Reclamation managers of the Seminoe Reservoir and with officials of the Medicine Bow National Forest.

Local groups have been consulted to ensure that all parties are aware of the plan and objectives.

Consultation

Agencies and Organizations Consulted

The RMP/EIS team has consulted with and/or received input from numerous organizations during the development of the document. The following list is representative of the agencies that have indicated an interest in the Medicine Bow-Divide RMP/EIS and that have been contacted during the planning process. This list is not inclusive. A complete list is on file at the office of the Great Divide Resource Area.

Federal Agencies

Department of Agriculture
- Forest Service
- Soil Conservation Service

Department of Commerce

Department of Defense
- U.S. Air Force

Department of Energy

Department of Housing and Urban Development

Department of the Interior
- Bureau of Indian Affairs
- Bureau of Land Management (other offices)
- Bureau of Mines
- Bureau of Reclamation
- Fish and Wildlife Service

Department of the Interior (continued)
Geological Survey
National Park Service
Office of Surface Mining
Department of Transportation
Environmental Protection Agency
Tennessee Valley Authority

Federal Elected Officials

Office of Senator Alan Simpson
Office of Senator Malcolm Wallop
Office of Representative Dick Cheney

State Agencies, Commissions, and University

State of Wyoming

Archives, Museums, and Historical Department
Department of Environmental Quality
Game and Fish Department
Geological Survey
Highway Department
Oil and Gas Conservation Commission
Public Lands Commission
Public Lands and Farm Loan District
Recreation Commission
State Engineer's Office
State Historic Preservation Officer
State Planning Coordinator's Office

University of Wyoming (various departments)

State Elected Officials

Wyoming Governor's Office

State senators and state representatives from Albany, Carbon, Laramie, and Sweetwater counties

Counties and Cities

Cities and towns of Bairoil, Cheyenne, Encampment, Hanna, Laramie, Medicine Bow, Rawlins, Saratoga, and Wamsutter

County commissioners, county planning commissions, and weed and pest control districts of Albany, Carbon, Laramie, and Sweetwater counties

DISTRIBUTION

In addition to the agencies and offices listed above, notices, requests for comments, and copies of this document have been sent to businesses, organizations, interest groups, and individuals. Copies of the RMP/EIS are available for review in the BLM offices at Rawlins, Lander, Worland, Rock Springs, Cheyenne, and Casper and in the county libraries in Albany, Carbon, Laramie, and Sweetwater counties.

PROTEST PROVISION

All parts of the proposed Medicine Bow/Divide (Great Divide) RMP may be protested except the preliminary wilderness suitability recommendations. The procedures for protesting are delineated in 43 CFR 1610.5-2 and are reprinted in their entirety below.

1610.5-2 Protest procedures.

(a) Any person who participated in the planning process and has an interest which is or may be adversely affected by the approval or amendment of a resource management plan may protest such approval or amendment. A protest may raise only those issues which were submitted for the record during the planning process.

(1) The protest shall be in writing and shall be filed with the Director. The protest shall be filed within 30 days of the date the Environmental Protection Agency published the notice of receipt of the final environmental impact statement containing the plan or amendment in the *Federal Register*. For an amendment not requiring the preparation of an environmental impact statement, the protest shall be filed within 30 days of the publication of the notice of its effective date.

(2) The protest shall contain:

(i) The name, mailing address, telephone number and interest of the person filing the protest;

(ii) A statement of the issue or issues being protested;

(iii) A statement of the part or parts of the plan or amendment being protested;

(iv) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record; and

(v) A concise statement explaining why the State Director's decision is believed to be wrong.

(3) The Director shall promptly render a decision on the protest. The decision shall be in writing and shall set forth the reasons for the decision. The decision shall be sent to the protesting party by certified mail, return receipt requested.

(b) The decision of the Director shall be the final decision of the Department of the Interior.

Protests should be filed with the Director (760), Bureau of Land Management, U.S. Department of the Interior, 1800 C Street NW, Washington, D.C. 20240.

Note that recommendations on wilderness study areas (WSAs) may not be protested since the BLM and the Secretary of the Interior are merely making recommendations to the President. Protests on these recommendations will be returned to the protesting party.

PREPARERS OF DOCUMENT

Introduction

This proposed RMP/final EIS was prepared by most of the people listed as preparers on page 301 of the draft document. There have been a few changes and additions, which are described below.

Added Duties

The following individuals, who are listed in the draft EIS, had additional duties in the final EIS.

Walt George served on the core team for lands.

Robert Janssen coordinated preparation of the revised Coal appendix.

Tom Rinkes served on the core team for wildlife.

Added Preparer

The following person was not listed in the draft EIS but contributed to the final EIS.

Connie Breckenridge, Biological Technician

Qualifications: Bureau of Land Management, 1 year; U.S. Forest Service, 2 years; U.S. Fish and Wildlife Service, 2 years. B.S., Fisheries and Wildlife Biology, Iowa State University.

Responsibility: Mapping, compilation of wildlife data.

COMMENTS AND RESPONSES

Introduction

There are three major sections of responses to comments in this chapter: (a) general responses covering areas of concern mentioned in several comments, (b) oral comments received at meetings, with responses, and (c) comments received in letters, and responses.

Certain areas of concern were mentioned in several comments. To avoid repetition and fragmentation of discussion of these issues, we have included a section of "general responses" before the comments from meetings and the copies of letters received. The general responses will be referred to as necessary in the responses to individual comments.

General Responses

1: Medicine Bow Wilderness EIS

Comments concerning the draft Medicine Bow wilderness EIS will be considered in the final version of that document, which is now being prepared. The final EIS will analyze management options for the Prospect Mountain, Bennett Mountains, and Encampment River Canyon WSAs. Each individual on the mailing list for the Medicine Bow wilderness EIS will receive a copy of the final EIS.

Through wilderness study reports, the BLM will make preliminary recommendations as to whether each WSA is suitable or nonsuitable for inclusion in the National Wilderness Preservation System (NWPS). These recommendations will be reported to Congress through the director of the BLM, the Secretary of the Interior, and the President. Final determination to designate or not to designate an area as wilderness can be made only by Congress.

2: Planning Tiers

Many commenters suggested changes to the RMP/EIS that are inappropriate for this stage of the BLM planning system. Some comments suggested courses of action for the RMP that were inconsistent with policy tier guidance; others suggested including a level of detail that is reserved for the more site-specific activity planning tier.

The BLM planning system is divided into three distinct tiers. Each subsequent tier builds on the base established by the previous one. The tiers are as follows:

> The *policy tier* identifies goals, objectives, priorities, and other factors for use in managing the public land resource. Policy is established in public laws, regulations, executive orders, court orders, guidance from BLM state directors, and approved documents issued by the President, the Secretary of the Interior, or the director of the BLM.
>
> The *resource management plan tier* establishes in a land use plan the combinations of land uses and resource uses, related levels of production or protection to be maintained, and general management practices and con-

straints for the various public land resources covered by the plan. This RMP/EIS is a part of the resource management plan tier.

The *activity plan tier* provides for the development of plans more detailed, more site specific, and more limited in scope than the resource management plan tier. The activity plan tier is initiated as necessary after an RMP is completed. An activity plan shows in detail how particular actions are to be carried out site-specifically to accomplish the objectives of the RMP. Activity plans are such documents as AMPs, HMPs, and use authorizations.

The Great Divide RMP must be consistent with established BLM policy. Restating policy in the RMP is unnecessary. Suggested courses of action that are inconsistent with policy tier guidance cannot be included in the RMP.

The RMP tier of the BLM's planning system is designed to establish the general management practices and constraints for various public land resources. RMPs establish general objectives for resource management without prescribing the details of accomplishing those objectives. More detail on accomplishing the general guidance in the RMP is developed in the activity plan tier.

Many comments suggested including a greater level of detail than is appropriate for the RMP tier. These concerns will be addressed during activity planning.

Activity plans refine the general RMP decisions and establish specific site plans and locations, stipulations, schedules, priorities, and detailed resource monitoring requirements. The activity planning level also is the appropriate time for undertaking relevant, in-depth economic analyses to determine benefit/cost relationships, efficiencies, and priorities for activities. BLM managers consider such economic determinations, along with many other factors, before any given activity plan is adopted.

Some types of activity plans that will be developed or revised after approval of the RMP are HMPS, recreation activity management plans (RAMPs), forest management plans (FMPs), AMPs, cultural resource management plans, and watershed management plans. Other types of activity plans are use authorizations such as timber sales and approved APDs. Site-specific consideration of land exchanges and other disposals is another example of activity planning.

The first order of business in activity planning often is to conduct inventories to refine our knowledge of the task at hand. RMPs are prepared within "real-world" funding and workforce constraints that do not allow us to have complete, detailed knowledge of every resource management situation. Over a large and diverse planning area, each situation that is encountered is unique and management actions must be based on site-specific information.

Environmental analysis will be carried out during development of activity plans. Activity planning will be conducted in public view. Involvement of the public and other agencies will be actively solicited as appropriate.

3: Content of the RMP/EIS

Many comments suggested that we include additional analysis or affected environment background information in the document. We have included the suggested information in the proposed RMP/final EIS where we determined that it was appropriate for the RMP tier of the BLM planning system (see general response 2) and that it was pertinent to the analysis or would help us to make a reasoned choice among the alternatives. If this was not the case, the information was not included in the final document.

The potential effects on various environmental components were carefully considered when the RMP/EIS was prepared. If we determined that there would be no effect on a particular environmental component, it was not discussed in detail in the analysis. The fact that there would be no effect was mentioned under the "Assumptions" sections to document that potential effects were considered.

Some activities are regulated by federal or state agencies to prevent adverse environmental effects, and effects are not projected. When no effects on a resource are projected from an action, the analysis may not include discussion on that action or resource. For example, under 43 CFR 3160, produced water is regulated by the BLM and by agencies of the state of Wyoming. All water produced during oil and gas activities must be disposed of in accordance with regulations. This ensures protection of pure water, both surface and subsurface. Since no effect on pure water is projected, analysis in the RMP/EIS would be inappropriate.

An EIS is intended to be analytic in nature, not encyclopedic. The intent of chapter 3 in the document is to describe the environmental components that would be affected by implementation of the RMP alternatives. Some other information is presented in that chapter to give a general overview of the resource. Information that is not necessary for an understanding of the analysis of the environmental consequences of the alternatives considered should not be included in the description of the affected environment.

4: Assumptions and Proposed Management Actions

Some comments seemed to indicate confusion about the difference between *assumptions* and *proposed management actions* in the draft document. For the purposes of analysis, some assumptions or projections have been made about future conditions. Most of these are presented in chapter 4 of the draft document, but some are in chapter 2 to facilitate comparison of the alternatives. It appears that the difference was not made clear in the draft RMP/EIS. We have tried to clarify the areas of confusion in this final document.

The management actions that would be implemented under each alternative are shown in chapter 2 of the draft document. In this proposed RMP/final EIS, the management actions that would be carried out under the proposed plan are described in chapter 2 of this document. For example, part of the *proposed management action* for livestock grazing in the proposed RMP would be to implement grazing treatments that will achieve the livestock grazing objective. For purposes of analysis, we *project* that authorized livestock use would be about 186,972 AUMs in the long term as a result of the grazing treatments. This figure is not a *proposed management action;* it is a *projection* presented for analysis purposes. The actual amount of available forage will depend on the success or failure of the management actions carried out, and it will vary from year to year and allotment to allotment. No adjustments in authorized use will be made until adequate data are acquired through monitoring of grazing allotments.

The *management actions* of the selected plan will guide management activities and further planning in the future.

There also seems to have been confusion about the *proposed management actions* regarding oil and gas lease restrictions and the *projections* or *assumptions* about the acreages that would be affected. The proposed *management actions* would place restrictions on leases to protect resources in certain areas such as steep slopes, riparian areas, and historic trails. The acreages that would be affected by these restrictions are estimates based on our best available information.

In chapter 2 of this final document, we have tried to be more explicit in identifying assumptions or projections to distinguish them from proposed management actions so that these areas of confusion can be clarified.

5: Monitoring

Several commenters suggested that a detailed monitoring plan be included in the RMP. Monitoring of the effectiveness of management actions will begin after the plan is implemented. Detailed requirements for monitoring will be developed during activity planning (detailed in general response 2). Before specific management actions are identified, attempts to formulate a monitoring plan would be premature. Where monitoring needs are known, they are included in the proposed plan.

For livestock grazing management, monitoring will begin upon approval of the RMP. Following selection of the RMP, a rangeland program summary will be prepared and distributed. Grazing decisions and agreements to be issued as part of the RPS will specify initial livestock grazing use levels. They also will identify the monitoring data needed and the procedures to be used in determining the extent of future adjustments. Within five years, monitoring data will be used in preparation of an updated RPS.

Livestock grazing monitoring studies will be conducted during the short term and will continue throughout the life of the plan. The various types of monitoring studies available are described on page 410 of the Livestock Grazing appendix to the draft RMP/EIS.

Wildlife habitat inventories and monitoring are listed by HMP area in table 6 in chapter 2.

6: Ecological Range Condition

Several commenters seemed to have the impression that the prevailing ecological condition class in the Medicine Bow grazing EIS area is poor. However, in more than two-thirds of that area, the ecological range condition is good or excellent. In almost one-third of the grazing EIS area, the condition is fair, and only slightly more than 1% of the area can be considered to have poor ecological range condition. These facts are stated in chapter 3 of the draft RMP/EIS, and acreages of condition classes are delineated by allotment in the Livestock Grazing appendix to the draft document.

Another impression seems to be that BLM is proposing to increase authorized livestock use in areas of poor ecological condition and that this would make the condition even worse, to the detriment of wildlife habitat, soils, and watershed

values. As explained in general response 4, the proposed management action for livestock grazing is to implement grazing treatments to achieve the livestock grazing objective.

Increases in livestock grazing preference would be granted only where additional forage production is permanently available and the forage requirements of other grazing animals (wildlife and wild horses) and watershed management requirements have been met. The increased forage production would be verified through monitoring before grazing preference could be permanently adjusted. We are not proposing to increase authorized livestock use to the detriment of wildlife habitat or of soils and watershed values.

7: Riparian Vegetation

Several letters expressed concern about improvement of riparian areas in the planning area.

In the more than 1 million acres of public land in the Medicine Bow grazing EIS area, it is estimated that approximately 3,911 acres contain riparian vegetation. This is less than ¾ of 1% of the public land in the grazing EIS area. Of the riparian vegetation that has been inventoried, the ecological range condition of less than 9% is good or excellent, 66% is in fair condition, and 25% is in poor condition.

In the allotments scheduled for AMP development ("I" allotments), livestock grazing would be excluded from an estimated total of 67 acres of riparian areas until their condition could improve enough to support limited seasonal grazing. In addition, riparian pastures would be included in grazing systems to be developed, or other treatments would be used to improve riparian areas. It is estimated that 1,658 acres of riparian areas would be improved.

Existing riparian vegetation could be improved, and possibly new riparian vegetation could be created, through construction of reservoir fences to exclude livestock, with water piped to a trough outside the fence. Approximately 56 acres surrounding existing reservoirs could be improved in this manner.

An approximate total of 1,781 acres of riparian areas are proposed for improvement actions in the proposed RMP. This is 46% of the riparian vegetation in the Medicine Bow grazing EIS area. Specific grazing treatments, monitoring systems, and schedules will be established as AMPs are developed.

Other actions to improve riparian areas and address small problem areas can be taken regardless of the allotment category. A detailed inventory of riparian area condition and management needs will be a high priority workload involving considerable effort during the first few years of implementation.

Requests for changes in kind of livestock from sheep to cattle would be considered along with management actions to maintain or improve riparian condition.

8: Split Estate

The proposed management actions in the proposed plan would apply only to surface and subsurface resources administered by the BLM. In areas of split estate (different ownerships of surface and subsurface minerals, usually private surface over federal minerals), the management actions would apply only to regulation of federally authorized mineral activities; the surface owner would manage the surface.

The estimated acreages of oil and gas lease restrictions listed in the proposed plan are based on acreages of federally owned minerals, regardless of whether the surface is federally or owned or under other ownership. Oil and gas leases on split estate in the planning area have been and will continue to be issued with the standard oil and gas stipulations. Application of stipulations is appropriate in that the BLM has the authority to take reasonable measures to avoid or minimize adverse environmental impacts that may result from federally authorized activities related to mineral leasing. The BLM informs potential lessees of the requirements that could be enforced.

Under the proposed RMP, 5 million acres of federal mineral estate would be open to leasing. Of this, BLM manages the surface on 4 million acres. Standard stipulations would be applied to the 5 million acres of federal mineral estate as explained above.

Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations (36 CFR 800) require that federal agencies consider the effects of their actions on cultural resources determined to be eligible for inclusion on the National Register of Historic Places. It further requires that we do so in consultation with the State Historic Preservation Office and, under certain circumstances, the Advisory Council on Historic Preservation.

The law and its implementing regulations make no distinction between eligible cultural resources on federal lands and those on private lands. Consequently, it is the BLM's responsibility to consider the effects of our actions on eligible cultural resources on split estate lands. Inability to obtain

permission from a private landowner does not relieve us of our consultation responsibilities.

This RMP/EIS covers management of the federal minerals underlying nonfederal lands but not the federal minerals underlying national forests. The Forest Service makes land-use planning decisions for minerals underlying lands administered by that agency.

9: Land Disposals

The proposed RMP identifies lands that appear to meet the FLPMA criteria for disposal and that would be available to be considered for disposal. It does not specify a preference for the use of one method of disposal over another, nor does it mandate that any of the identified tracts will be disposed of. Specific consideration would be given to each proposal for disposing of lands, and an environmental analysis would be conducted in each case before any disposal action would be taken. This is a part of activity planning (see general response 2).

In the Lands appendix to the draft RMP/EIS, on page 335, is a list of the criteria that would be applied to each tract before any further disposal action could be taken. Among those criteria is a provision that lands would not be disposed of if they had been found to contain high value wildlife, recreation, or other resource values or to have overriding public values. However, certain exceptions may apply.

Procedures for landownership adjustments also are discussed in the Lands appendix, pages 335 and 336. Sales and exchanges are the primary methods for effecting changes in landownership. The order of their discussion in the Lands appendix should not be interpreted as an order of preference for land adjustment actions. The BLM's primary objectives of land adjustment actions are to increase the cost-effectiveness of land management by eliminating isolated parcels, to provide for local social and economic needs, and to enhance the uses and values of existing public lands. The BLM will employ either sale or exchange actions to meet these objectives.

Public access will be considered as a part of the process of determining whether specific parcels would be disposed of. Appropriate public input will be solicited and considered in all phases of disposal actions.

10: Withdrawals and Classifications

The withdrawals and classifications discussed in the RMP could be envisioned as falling into two broad categories; segregation from surface entry and segregation from mineral location. Some withdrawals or classifications fall into both categories.

Segregations from surface entry limit operation of the land laws, including those pertaining to disposal of public lands. An example is the C&MU classifications under the Classification and Multiple Use Act of 1964.

Segregation from mineral location limits operation of the mining laws pertaining to locatable minerals. Such segregations are placed on areas with important values that cannot be adequately protected by other means. An example is the public water reserve withdrawals that segregate against the location of nonmetalliferous minerals.

For the purposes of this document, classifications that segregate public land from operation of the land laws (such as disposal), from mineral location, or from mineral leasing are discussed as "withdrawals."

Under the proposed RMP, most existing withdrawals and classifications would be revoked because they are no longer serving their intended purpose. For example, the C&MU classifications were interim classifications that allowed a four-year grace period from disposals while the lands were classified for either multiple-use management or disposal. The multiple-use provisions of FLPMA have replaced the purpose and objectives of the C&MU classifications.

Another example of withdrawals that could be revoked is the coal and oil shale withdrawals. These withdrawals cover approximately 600,000 acres of the 903,000 acres of withdrawals from mineral location in the planning area. The purpose of these withdrawals was to prevent the loss of federal revenues from these leasable minerals through patent actions under the general mineral laws. The Mineral Leasing Act removed this threat, so the withdrawals are no longer necessary. In effect, they unnecessarily restrict mineral and other activities.

Withdrawals and classifications will be reviewed individually to see if they are still serving their intended purpose before they are revoked. This review will include appropriate environmental analysis and public involvement. Review status is listed in table 5 in the draft document. Additional review is scheduled for fiscal years 1988 and 1989 in this planning area.

Withdrawals from mineral location pertain to locatable minerals. They do not restrict leasable mineral activities.

As we explained on page 20 of the draft RMP/EIS, withdrawals or classifications involved in *National Wildlife Federation (NWF) v. Burford, et al.* will not be revoked until the lawsuit is settled.

Responses to Individual Comments

Introduction

Oral comments were received at the public hearings in Rawlins and Laramie and at a meeting of the Rawlins District Grazing Advisory Board. A brief report of the comments at the Grazing Advisory Board meeting appears in the section on oral comments, which also contains a transcript of the public hearing in Rawlins. The only comment received at the Laramie public hearing did not pertain specifically to the RMP/EIS; rather, it was a general comment on BLM recreation management. Therefore, the transcript of that hearing has not been reproduced in this document. It is available for review at the Great Divide Resource Area office.

Numbers have been inserted on the meeting reports to identify individual comments, and correspondingly numbered responses to the comments follow each report.

Similarly, the letters received are reproduced herein, with numbers to identify the separate comments, and numbered responses follow each letter. A few letters have been retyped verbatim for better readability.

All the comments that were received on the draft RMP/EIS are listed in table 14. The meetings at which oral comments were made are listed first, followed by a list of comment letters, which are numbered in the order in which they were received. The person or organization commenting and the topics discussed in each are identified. Some letters pertained only to wilderness; those letters are not reproduced in this document because they will be addressed in detail in the final Medicine Bow wilderness EIS. An asterisk by a meeting description or a letter number on the table indicates that the comment is reproduced and responded to in this document.

TABLE 14

COMMENTS RECEIVED AND TOPICS ADDRESSED

Note: All comments received are listed, including those that pertained only to wilderness. Numbers indicate the order in which the letters were received. An asterisk indicates that the comment is reproduced and responded to in this document. Comments pertaining to wilderness alone will be addressed in detail in the final Medicine Bow wilderness EIS, which is in preparation. That document also will contain the transcript of the Laramie public hearing and responses to comments made at that hearing.

Key to Topic Codes: ACEC = areas of critical environmental concern; CR = cultural or paleontological resources; F/F = forestry and/or fire management; LAN = lands or access; LVH = livestock grazing management, vegetation, or wild horses; MIN = minerals; NS = no specific comment, no response required; PEO = general planning, general information, or errors or omissions; REC = recreation (includes off-road vehicles); SWA = soils, water, and air; W = wilderness; WL/R = wildlife, threatened or endangered species, or riparian areas.

MEETINGS

Meetings	Topic(s) Addressed
Grazing Advisory Board, Rawlins, July 30, 1987*	ACEC, LVH
Public Hearing, Rawlins, August 11, 1987*	ACEC, LVH, MIN, SWA, WL/R
Public Hearing, Laramie, August 12, 1987	NS

LETTERS

Letter Number	Name of Organization or Individual Commenting	Topic(s) Addressed
1*	Frontier Archaeology: James M. Welch	CR
2	Dan Southard	W
3*	Nina Trapp	CR
4	Kirk Koepsel	W
5*	Wyoming Department of Environmental Quality: Paige W. Smith	ACEC
6*	Continental Divide Trail Society: James R. Wolf	ACEC, CR, REC
7*	Equitour: Bayard Fox	W, REC
8*	Soil Conservation Service, USDA: Frank S. Dickson	NS

TABLE 14 (Continued)

COMMENTS RECEIVED AND TOPICS ADDRESSED

LETTERS (Continued)

Letter Number	Name of Organization or Individual Commenting	Topic(s) Addressed
9*	Department of the Air Force: Edward Lopez	F/F
10*	Edward A. Richner	LVH, WL/R
11*	Medicine Bow National Forest, Forest Service, USDA: Stephen Nielsen	ACEC, F/F, PEO, REC, SWA, WL/R
12*	Larry DiBrito	NS
13*	Larry DiBrito	NS
14*	Ann Brown	CR, LAN
15	John F. Freeman	NS
16*	Western Area Power Administration, DOE: Gary W. Frey	NS
17*	Larry Neumann	F/F, LVH, WL/R
18*	Geological Survey, USDI: James F. Devine	MIN, SWA
19	Michael N. Warlick	W
20	Mary Beck	W
21	Deborah Throop Wilson	W
22	Dale Houghtaling	W
23*	Outdoor Life: Erwin A. Bauer	MIN, W
24	Chuck Franklin, M.D.	W
25*	Scott L. Findholt	ACEC
26	G. L. Honeyman	W
27	Daniel Roach	W
28*	Wyoming Recreation Commission, State Archaeologist: Mark E. Miller	CR
29	Michael C. Herber, M.D.	W
30	Erik Johnsrud	W
31	Harriette Wallace	W
32*	The Nature Conservancy: Bernie Hall	ACEC
33	Ola Harrison	W
34	Judy Wilson	W
35	Rudolph Sucharda	W
36*	Bureau of Mines, USDI: William Cochran	MIN, W
37*	BLM Lands Foundation: George Early	PEO, W
38	K. Knisley	W
39	Rudy Schmeidt, M.D.	W
40*	Bureau of Indian Affairs, USDI: Norris M. Cole	LAN
41	Steven Poole	W
42	Marsha K. Esmay	W
43*	Tom Higham	REC, W
44	Harold C. Mosher	W
45	Timothy Rockhold	W
46*	Larry DiBrito	PEO
47	Barbara Heinrich	W
48	Mark Francis	W
49	Sterling Palmer	W
50	Michael Macklin	W
51	Jill A. Lorenzoni	W
52	Joe and Adra Cabell	W
53	Heather Fern	W
54	Joan Stoner	W
55	Claire C. Poole	W
56	Wolfgang M. W. Roth	W
57	Frank Norris	W
58	William D. Anderson	W
59*	Susan E. Cox	MIN, W
60	Wiley Doran	W
61	Costa Columbus	W
62*	Patrick Heaney	MIN, W
63*	Bureau of Reclamation, USDI: Robert Schroeder	LAN
64	Taylor Randolph	W
65	D. A. Strong	W
66	Dave Foreman	W
67	Maureen Keilty	W
68	F. L. Ribe and Molly K. Ribe	W
69	Geri Fuller	W

TABLE 14 (Continued)

COMMENTS RECEIVED AND TOPICS ADDRESSED

LETTERS (Continued)

Letter Number	Name of Organization or Individual Commenting	Topic(s) Addressed
70	Carolyn Dejanikus	W
71	Mike Lovinger	W
72*	Office of Surface Mining Reclamation and Enforcement, USDI: Ranvir Singh	SWA
73	Robert and Linda Morris	W
74	Thomas E. Cox	W
75	Ralph E. and Elizabeth R. Dunkel	W
76	James L. Fronte and Lori A. Yosick	W
77	Richard C. Wilson	W
78	Robert Saigh	W
79	Larry DiBrito	W
80	Nancy L. Nesewich	W
81	Donald Purinton	W
82	Gerald L. Bloomer	W
83	Michael F. Breslow	W
84	Ed Clsek	W
85	Jeff Thieret	W
86	Robert Mossman	W
87*	John R. Swanson	CR, W, WL/R
88	Pam Wallen	W
89	Linda J. Olen	W
90	June Britton	W
91	Ronald J. Parry	W
92	Herbert R. Brettell, M.D.	W
93*	Marathon Oil Company: Bradley G. Penn	MIN
94	William B. MacAulay	W
95*	Mike Sullivan, Governor of the State of Wyoming	NS
96*	Wyoming State Historic Preservation Officer: Thomas E. Marceau	CR
97*	Wyoming State Engineer's Office: Frank J. Trelease	LVH, SWA, WL/R
98*	Wyoming Department of Environmental Quality: Randolph Wood	LVH, PEO, SWA, WL/R
99*	Wyoming State Forestry Division: Carl E. Johnson	F/F
100*	Geological Survey of Wyoming: Gary B. Glass	LVH, MIN, W
101*	Wyoming Oil & Gas Conservation Commission: Donald B. Basko	MIN
102*	Wyoming Recreation Commission: Clifford E. Mikesell	CR, REC
103*	Wyoming Game and Fish Commission: Francis Petera	ACEC, CR, F/F, LAN, LVH, MIN, REC, SWA, W, WL/R
104	Dave Clarendon	W
105	Roy G. Jones	W
106	Rona Fried and Trip Overholt	W
107	Kathleen M. Armstrong	W
108	Kevin and Michelle Whitaker	W
109	John F. Pamperin	W
110	Dean and Lucy Logan	W
111	The Rev. Steve Ekholm	W
112*	Rocky Mountain Oil and Gas Association: Alice Frell Benitez	ACEC, CR, MIN, SWA
113	A. Chambers	W
114*	Wyoming Wildlife Federation: Matt Reid	F/F, LAN, LVH, MIN, REC, SWA, W, WL/R
115*	U.S. Environmental Protection Agency: Robert R. DeSpain	ACEC, LVH, MIN, PEO, SWA, W, WL/R
116*	Dick Lake	LAN
117	Bighorn Forest Users Coalition: Darrell Leigh	W
118*	Robert B. Keiter	MIN, W
119*	Linda Reifschneider	W
120	Robert A. Ferris	W
121	John Evenson	W
122*	Celia Lindblom	MIN, REC, W
123	Chuck Shepard	W
124	Angus Brown	W
125	Norm Sharp	W
126*	Tina Ragan Schaefer	MIN, W
127*	Petroleum Association of Wyoming: Wendy A. Frueauf	ACEC, CR, MIN, SWA
128*	National Park Service, USDI: Richard A. Strait	ACEC, CR, MIN, REC, W, WL/R
129*	Sierra Club: Jeffrey R. Foster	ACEC, F/F, LAN, LVH, MIN, PEO, REC, SWA, W, WL/R

TABLE 14 (Continued)

COMMENTS RECEIVED AND TOPICS ADDRESSED

LETTERS (Continued)

Letter Number	Name of Organization or Individual Commenting	Topic(s) Addressed
130	Steven B. Giddings	W
131	Robert and Ruth Zeller	W
132	Linda Koevenig	W
133	Cynthia M. Boyhan	W
134	N. Sukumar	W
135	Heidi Rosenal	W
136	Mrs. Julie Reusch	W
137	Rick Cook	W
138	Mark Becker	W
139	Eugene W. Krebsbach	W
140	Martin Schrattenholzer	W
141	Fannie Lee Ford	W
142	David L. Weymiller and Sandra R. Lieb	W
143	Mary V. Hoffman	W
144	John T. Bullitt	W
145	John M. Chaplick	W
146	Steve Hanson	W
147	Eric T. Freyfogle	W
148	Gerald Ottone	W
149	David B. Haviland	W
150*	John and Diana Ball	MIN, W
151*	Jeff A. Kessler and David E. Carver	ACEC, F/F, LAN, LVH, MIN, REC, W, WL/R
152	Lynette Whalen	W
153*	U.S. Fish and Wildlife Service, USDI: Arthur Andersen	ACEC, F/F, LAN, LVH, MIN, WL/R
154*	Chevron: Lisa F. Mercier	CR, MIN, REC, SWA, WL/R
155*	Wyoming Outdoor Council: A. Donn Kesselheim,	ACEC, F/F, LAN, LVH, MIN, SWA, WL/R
156*	Louisiana Pacific Corporation: David F. Slater,	F/F
157	Jim Allard	W
158	Tom Cope	W
159*	Amoco Production Company: Neil W. Allen	ACEC, CR, MIN, PEO
160	Janet Lang	W
161*	Joe and Mary Rankin	MIN, W
162	David B. Reid	W
163	Reed Secord	W
164	Frances Perlman	W
165	Sam Matos	W
166	John Bird	W
167	Mrs. Tammis Lazarus	W
168	James Ambrose	W
169*	William S. Brenneman	F/F, MIN, PEO, REC, SWA
170	Dr. Lorin Swinehart	W
171*	Gabriel Zinsli	REC, W
172	Susan and Peter Moran	W
173*	U.S. Fish and Wildlife Service, USDI: R. G. Starkey	LAN, WL/R

ABBREVIATIONS: DOE = United States Department of Energy; USDA = United States Department of Agriculture; USDI = United States Department of the Interior.

Oral Comments Received, and Responses

Comments Made at Grazing Advisory Board Meeting

Responses to Advisory Board Meeting Comments

1. ACEC designation does not imply exclusion of livestock grazing. The BLM would take sufficient management actions to protect the values for which an area was designated an ACEC. Restrictions on livestock grazing would be considered if necessary; however, none are anticipated in the management actions described in the proposed RMP. If livestock grazing adjustments were found necessary, further planning and consultation would be required.

2. The reference on page 21 of the draft RMP/EIS to "unsatisfactory condition" in "I" category allotments should not be interpreted to mean that all "I" allotments are in poor condition. A better choice of words might have been "improve current resource conditions" or "improve current grazing management." Please see the categorization criteria in the Livestock Grazing appendix to the draft RMP/EIS for a more complete description of conditions that exist in "I" allotments.

Transcript of Rawlins Public Hearing

[The following is a summary of comments made by Bob Grieve at the District Grazing Advisory Board meeting at the Rawlins District office on July 30, 1987]

Bob Grieve inquired if it was within the district's charter to review the plan. Dale Harris responded by explaining all members of the board to review the document and provide group comments as well as individual noted particulars to Jerina Kane. It was mentioned that the open houses and public meetings were a good forum in which to make comments and concerns known to the BLM.

1 Bob Grieve asked that the BLM address some concerns he had about the plan. The document states that one option of management of an ACEC after designation is that grazing may be excluded. This was a great concern to Mr. Grieve. Bud Holbrook said that any action following designation will require consultation. The only initial restriction following designation is that filing of notices of intent with the BLM will be required. Any action to reinstitute following deactivation must be followed by future planning and public comment.

2 Mr. Grieve also expressed concern about the allotment categorization criteria on page 21 and the impression that all "improve" allotments had unsatisfactory condition instead of "just some management problems." The section on page 21 says "improve current unsatisfactory condition." It was suggested that this wording be checked for consistency with the criteria.

1

1 BEFORE THE BUREAU OF LAND MANAGEMENT
2 STATE OF WYOMING ORIGINAL
3 ----------
4 IN THE MATTER OF THE PUBLIC HEARING
5 ON THE DRAFT WILDERNESS AND RESOURCE
MANAGEMENT PLAN ENVIRONMENTAL IMPACT
6 STATEMENTS FOR THE MEDICINE BOW AND
DIVIDE RESOURCE AREAS.
7 ----------
8 TRANSCRIPT OF HEARING PROCEEDINGS
9 PURSUANT TO NOTICE duly given to all
10 parties in interest, this matter came on regularly
11 for hearing into the second portion of the hearing on
12 the 11th day of August, 1987, at the hour of 7:30
13 p.m., at the Bureau of Land Management Offices, 1300
14 North 3rd Street, Rawlins, Wyoming, before the Bureau
15 of Land Management Hearings panel, Hearing Officers
16 Ed Plesk and Mike Kerbs, associate district managers,
17 presiding, with John Nusbend and Bob Tigner also
18 present.
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This hearing gives us an opportunity to receive comments from the public and private sectors of the community. In addition we welcome written comments received during the review and comment period which will close on September 18th, 1987.

Today's hearing is the first scheduled for this draft statement. The second and last hearing will be held in Laramie, Wyoming at the Laramie Plains Civic Center 710 Garfield, Room 127 at 7:30 p.m., tomorrow night, August 12th.

The BLM has appointed a hearings panel to receive your comments and assisted with me are Mike Kerbe, the associate district manager, John Husband, the team leader for the Medicine Bow and Divide RMP effort; and Bob Tigner, the team leader for the Medicine Bow Wilderness EIS effort. EIS is Environmental Impact Statement.

For the information of any news media that might be present, Bob Jansen is here to assist you and, Bob, you might make your presence known. If anybody has any questions of him.

An official recorder, Lori Arnold of the Wyoming Reporting Service, will take a verbatim transcript of this hearing and it will also be recorded on tape. To insure a complete and accurate

PROCEEDINGS

(Hearing proceedings commenced 7:30 p.m., August 11, 1987.)

MR. FIEX: I think we will go ahead and get started. I'd like to bid you welcome to the wilderness hearing. My name is Ed Fiex. I'm associate district manager for the Worland District in Wyoming. I've up here helping out the Rawlins District in presiding over this hearing.

I will be presiding officer for the first portion of this hearing, and then we will go into the second portion of the hearing at that time and I will relinquish it to Mike Kerbe, associate district manager here at Rawlins.

The primary purpose of this hearing is to receive testimony on the draft wilderness EIS for the Medicine Bow Resource Area and associated wilderness recommendations. Thus this hearing fulfills requirements of the Wilderness Act of 1964 for a public hearing. However, after we have heard all wilderness statements, testimony will also be accepted on the adequacy of the draft environmental statement prepared by the Rawlins BLM district on the Resource Management Plan for the Medicine Bow and Divide Resource Areas.

record we suggest that only one person speak at a time.

If you did not sign in the register when you entered the room, please do so at this time. If you wish to testify during the hearing, you should so indicate on the register, that way we will be able to call your name.

While the hearing is in session no one will be recognized other than the designated speaker and members of the hearing panel.

I want to emphasize we are holding this hearing to obtain your views. To do this there are certain guidelines which must be observed during the hearing to best use the time allowed. These guidelines are listed for you on the handout and I will go over them now.

The first is please confine your statements to the views on the preliminary suitability recommendations in the draft wilderness EIS, the preferred Resource Management Plan alternatives and the draft Environmental Impact statement. Any other remarks are inappropriate for this hearing.

This hearing is strictly designed for you to give information to us. Therefore, there will be

no debate or cross questioning between participants.

The hearing panel may ask clarifying questions, as necessary, at the conclusion of each speaker's remarks. These questions, however, should not be interpreted as expressions of any predetermined position of the panel members, the BLM or the Department of Interior.

All speakers will confine their remarks to 10 minutes or less. The presiding officer will inform you when you have about one minute remaining.

For those having both oral and written statements, we suggest that your oral statements highlight the points you wish to make, thus, allowing you to stay within the specified time frame. If you choose to submit only a written statement, we assure you that it will be given the same consideration as oral statements.

First to speak will be those indicating a desire to present testimony concerning the wilderness recommendations. After receiving all wilderness testimony, the hearing will be opened up for statements on other aspects of the draft RMP/EIS. Within each of these two portions of the hearing speakers will be called in the order that their request to speak was received. Speakers not present

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to that is all wilderness. The preferred alternative is the proposed action, no action, no wilderness.

For Prospect Mountain which encompasses 1,145 acres, the proposed action is all wilderness, the alternative is no action, no wilderness and the preferred alternative is the proposed action, all wilderness.

For the Bennett Mountains encompassing 6,003 acres, the proposed action is no action, no wilderness. The alternative is all wilderness and the preferred action is the proposed action, no action, no wilderness.

MR. FISK: Thanks, Boo. Is there anybody who has signed?

MR. JANSSEN: Ed, we have no one who indicated they wanted to testify on the wilderness portion.

MR. FISK: Since nobody has indicated on the sign-up sheet then I'd like to open it up in case somebody from the audience would like to at this time give a statement on the wilderness matter before us.

Seeing no response, then I guess we can go on to the other aspect of this hearing, which is the second part. And I'd like to thank you for coming

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when called will be placed at the end of the list.

And I'd like to state again that if you would give your name and address when you get up and any organization you represent it would be helpful to the recorder.

Finally, a transcript of these proceedings will be available for review in the Rawlins district officer. Copies can be purchased from Wyoming Reporting Service, Post Office Box 165, Cheyenne, Wyoming, 82003.

Is there any questions on how we are going to conduct this hearing or take the testimony? If there are no questions, I'd like to have Bob Tigner will briefly describe the preliminary suitability recommendations in the wilderness EIS and then we will proceed to take public comment.

MR. TIGNER: Thank you, Ed. Within this Environmental Impact Statement we studied four of the wilderness areas, wilderness study areas, Encampment River Canyon, Prospect Mountain and the Bennett Mountains.

There are two alternatives for each wilderness study area. For the Encampment River Canyon, which encompasses 4,847 acres, the proposed action is no action, no wilderness. The alternative

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and participating in the wilderness portion of it. And I will turn it over to Mike Karbs to accept statements on other aspects of the RMP/EIS.

MR. KARBS: Thank you, Ed. My name is Mike Karbs and I'm the associate district manager here in Rawlins for the Rawlins District BLM. I'd like to remind you that the ground rules that were in effect for the wilderness portion of the hearing are still in effect and also just clarify that this part of the hearing will be dedicated to to statements or comments on the Resource Management Plan, the various alternatives considering the Resource Management Plan and before we open it up for any testimony, I'd like to have or like to ask John Husband to give a brief summary of the preferred Resource Management Plan alternative.

MR. HUSSAND: Thank you, Mike. The Medicine Bow and Divide Resource Management Plan or RMP is being prepared to provide a comprehensive framework for managing public lands and resources in the planning area. The planning area encompasses some 12 1/2 million acres in various ownerships in Albany, Carbon, Laramie and eastern Sweetwater Counties.

The RMP covers 4 million acres of public

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land and an additional 1 million acres of federal minerals underlying private lands within the planning area. Four alternative RMPs were developed with public input for consideration in the draft Environmental Impact Statement or EIS.

Alternative A would continue present management direction.

Alternative B would resolve resource conflicts that occur under existing management by restricting surface-disturbing activities.

Alternative C would resolve resource conflicts that occur under existing management by intensively managing all resources in an attempt to mitigate impacts caused by surface-disturbing activities or to enhance a resource while maintaining other resource values.

Alternative D, the preferred alternative, would attempt to achieve optimal resource management by balancing the use of restrictions with intensive management. This preferred alternative would protect sensitive and significant values while allowing resource use and development in an environmentally acceptable manner. Mike.

MR. KARSS: We do have one person that has indicated an interest in providing some testimony

on the Resource Management Plan. We'd like to ask Barbara Parsons to step forward to the podium and, Barbara, again before you begin your statement if you would give your name and address and any organization you represent.

MS. PARSONS: I apologize for if this doesn't sound as cohesive as it might have. I slipped back from a backpack trip and put it together. But I would first like to thank John Husband for meeting with me and the executive director of our organization to answer some questions. This was really appreciated and it helped me, too.

I am Barbara Parsons, 319 West Larsen, Rawlins, Wyoming. I am a board member of the Wyoming Outdoor Council.

Although the Medicine Bow Resource Management Plan addresses critical conservation issues, the preferred alternative is heavily skewed toward consumptive use.

Dr. T. A. Larsen, a Wyoming historian, some years ago commented, "Perhaps it is not time to grieve, but to ponder whether what the world wants from Wyoming is worth more than what Wyoming already offers the world." This management plan doesn't adequately address "what Wyoming already offers the

world."

Several areas were identified as potential ACECs, areas of critical environmental concern. Only five -- you could call it four but I separated the couple that you mentioned -- would be designated ACECs under alternative D.

Baggs elk crucial winter range was not designated an ACEC even though it is essential to the area elk population. A proposed dam site, possible mining, livestock grazing, and other human activities would seriously impact this crucial elk area. This area should be designated an ACEC.

Sand Hills has been designated an ACEC under the preferred alternative, and as such, there will be intensive management of surface-disturbing activities. Last year BLM was going to close some of the roads in the area. Yet the most serious disturbing activity was not addressed. Cattle have seriously damaged the wetlands throughout the area. Grazing has been too extensive and prolonged to maintain these riparian areas in good condition.

Following the recent downpour in the area, which is about two or three days ago, it was observed the cattle compacted the soils and heavily damaged the roads in the area. Additional roads should not

be built, and you made reference if you had oil or mineral activities in the area, and the non unused aspectness of the road in the area should be reconsolitated, and I'm talking about areas that have been used and now they have got to the place where you can't go any more and there's other roads that have been built around them.

The Sand Hills have special, unique habitat features resulting in a very abundant population, including the sharp tailed grouse. Priority usage should be given to wildlife in this area.

Our forests have value besides timbering and should not be managed like a tree farm. Yet a 62.3 percent increased in allowable harvest shows a preference for consumptive uses of the forest. The plan states on page 108 that "harvest from public lands in the planning area is important for meeting the demand for wood products."

Furthermore, while a healthy forest is desirable, the oft used excuse, "We better get the timber before the beetles and the mistletoe do," is overutilized. Clearcut timbering and subsequent road building causes erosion, compacting of soil, and disruption of a natural, diverse ecosystem. Ribes,

aspen, spruce, and other forest growth is minimal with a lodgepole forest predominant.

Although WOC does not oppose all timbering, a slower, more selectively considered harvest would be more appropriate.

Under livestock grazing management, grazing could potentially increase 16 percent even though monitoring hasn't been completed. In the management plan, pages 178 through 79, it states lands were inadequately inventoried -- areas that were less productive or inaccessible were given the same productive ratings as other higher productive areas -- resulting in a showing of higher availability than actually exists.

Therefore, some of these ranges have been overstocked and overused long enough to cause a loss of health and vigor of the plants and a resultant decline in the ecological condition of the vegetative communities. It further states that in riparian areas grazing pressure has been too heavy and too prolonged to maintain the riparian sites in good condition.

Since it is in the long-term best interest of the livestock industry to maintain the range in optimal condition, continuous monitoring should occur

end grazing levels adjusted on a yearly basis with the objective being optimal range condition. And by the way I do have a statement that I will give you.

Under minerals management preference again favors commodity usage with reduced withdrawal acreage up to 91 percent. Oil and gas leasing, coal mining and other mineral activities should not be allowed in the ACEC areas. Coal mining should not occur where reclamation is impossible or iffy or where there is a high potential to cause unacceptable rates of accelerated erosion.

For instance, on page 290 it states: Development of the 3,850 acres that would be available on Atlantic Rim would have a high potential to cause unacceptable rates of accelerated erosion. If the drainages with steeper slopes were developed, difficulty of reclamation could lead to accelerated erosion over the long term.

Coal development in the Atlantic Rim could also mean a substantial reduction in the elk population, and thus, a consequential long-term adverse affect on the elk herd. This is stated on page 295. It should not be mined if this will occur.

Page 227 states coal development would not

affect fishing North Platte area of Seminoe Reservoir. Whenever mining there should be a buffer zone along waterways to prevent siltation, erosion and leaching of exposed alkali soils which could change the PH of the waters and cause excessive siltation.

Wildlife Habitat and Fisheries Management often seems to be at odds with other uses. While more attention is now being given wildlife, more protection is needed. Additional, special areas need to be set aside exclusively for habitat protection and devastating impacts should not be allowed such as the possible scenario on Atlantic Rim and Red Rim.

In conclusion, BLM should be more aggressively protective of public lands. Reasonable public access should occur when grazing leases are let. When reclamation such as pipelines takes place, careful attention should be given to plants like woody aster with its selenium absorbing tendency so we don't have any more unpleasant surprises. Although it's not known how woody aster and other noxious foreign weeds have been introduced, that is an obvious possibility.

While each administration in Washington sets priority policies for the agency to follow, the

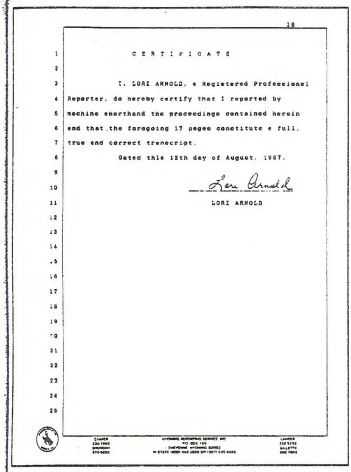
management of public lands should protect the integrity of Wyoming's natural systems. Further detailed comments will be submitted on both the Resource Management Plan and on the wilderness statement and I thank you.

MR. KARBS: Thank you, Barbara. We don't have anyone else at this time registered to testify. I'd also ask if there's anyone in the audience who would like to give some verbal comments at this point or save a statement.

Okay. I think then we will go ahead and close the hearing at this point. And I do want to thank you all for coming out tonight and showing your interest in our Resource Management Plan. Your participation is truly appreciated and there will be several of the BLM folks here after the hearing.

And if you have any questions, we would also invite you to, if you choose to, to submit written comments up through the deadline of, I believe, September 18th of this year and those comments would come to the district manager here in Rawlins, Post Office Box 670, Rawlins, Wyoming and the zip code is 82301. Thank you.

(Hearing proceedings concluded 7:50 p.m., August 11, 1987.)

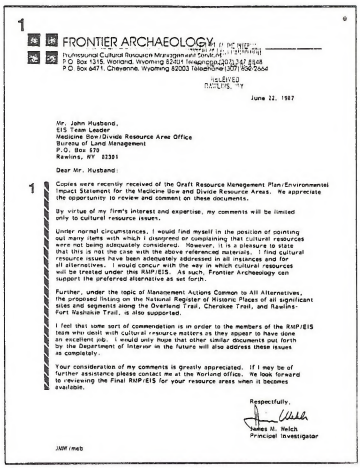


CERTIFICATE

I, LORI ARNOLD, a Registered Professional Reporter, do hereby certify that I reported by machine shorthand the proceedings contained herein and that the foregoing 17 pages constitute a full, true and correct transcript.

Dated this 12th day of August, 1987.

LORI ARNOLD



FRONTIER ARCHAEOLOGY

Professional Cultural Resource Management Consultants

P.O. Box 1315, Worland, Wyoming 82401 Telephone (307) 347 6448
P.O. Box 6471, Cheyenne, Wyoming 82003 Telephone (307) 634 2564

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June 22, 1987

Mr. John Husband,
EIS Team Leader
Medicine Bow/Divide Resource Area Office
Bureau of Land Management
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Husband:

1 Copies were recently received of the Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas. We appreciate the opportunity to review and comment on these documents.

By virtue of my firm's interest and expertise, my comments will be limited only to cultural resource issues.

Under normal circumstances, I would find myself in the position of pointing out many items with which I disagreed or complaining that cultural resources were not being adequately considered. However, it is a pleasure to state that this is not the case with the above referenced materials. I find cultural resource issues have been adequately addressed in all instances and for all alternatives. I would concur with the way in which cultural resources will be treated under this RMP/EIS. As such, Frontier Archeology can support the preferred alternative as set forth.

Further, under the topic of Management Actions Common to All Alternatives, the proposed listing on the National Register of Historic Places of all significant sites and segments along the Overland Trail, Cherokee Trail, and Rawlins-Fort Washakie Trail, is also supported.

I feel that some sort of commendation is in order to the members of the RMP/EIS team who dealt with cultural resource matters as they appear to have done an excellent job. I would only hope that other similar documents put forth by the Department of Interior in the future will also address these issues as completely.

Your consideration of my comments is greatly appreciated. If I may be of further assistance please contact me at the Worland office. We look forward to reviewing the final RMP/EIS for your resource areas when it becomes available.

Respectfully,

James M. Welch
Principal Investigator

JMW/meb

Responses to Rawlins Public Hearing Comments

1. Under the proposed RMP, a portion of the Baggs elk crucial winter range would be included in the Jep Canyon proposed ACEC.
2. Please see general responses 4, 6, and 7.
3. Committed mitigations included in the Coal appendix to the final EIS would prohibit development in the major drainages on Atlantic Rim. The impacts on the Baggs elk herd would be minimized.

Letters Received, and Responses

Response to Letter 1

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

3A

[This handwritten letter has been typed verbatim to save space.]

Nina Trapp
511 Vicente
Rawlins, WY 82301

6-23-87

Mr. John Husband
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Husband,

The following are comments on the Medicine Bow-Divide Resource Area RMP, EIS and Wilderness Supplement.

1 Pg 52 Resource Management Plan
Alternatives A, B, C, and D.
How can specific acreages as well as VRM classes be assigned to historic trails which would impose lease restrictions without any current inventory information.

2 pt 87 Locatable mineral withdrawals are the most efficient and effective way to protect historic trail resources from incompatible mineral exploration and development actions.

3 pt 100 Overland Trail Special Management Areas
What about Indian-white hostilities which were a part of the decision to establish the Overland Trail?

4 If trail uses 1.7 meters apart were the only criteria for National Register eligibility, there would only be a very few in the entire state. The document needs to recognize the other criteria of eligibility.

5 Cherokee Trail
This is very confusing. Essentially this says that every trail in the Divide Resource Area was once part of the Cherokee Trail. Numerous trails were established at different times for different purposes. It might be helpful to refer to the General Land Office Plats (GLO) for a clearer picture.

6 pg 102 No mention is made of the Rawlins-Baggs Road nor the Union Pacific Railroad.

7 General Comments
I was unable to locate any references used in the compilation of the cultural section. From where was the cultural information obtained? The cultural sections are inequally thin and there is a recurrent theme that generally says that surface disturbance is good because it is the catalyst for cultural inventory and evaluation. Unfortunately, cultural sites, portions of them or culturally homogeneous areas are inventoried and evaluated based on

3B

the surface disturbance boundaries and not on cultural boundaries. Such activity is analogous to a blind man holding an elephant's tail and concluding that an elephant is like a rope. Therefore, the data base is increased but the information in the data base is erroneous making it useless. Cultural resources will receive just treatment when their inherent worth is considered instead of their interaction with other programs.

Appendices

8 pg 118 Please explain how the use categories are implemented with regard to site evaluation.

9 pg 119 Standard Protection Measures
I would suggest including the applicable laws and regulations which provide the authority under which the cultural program operates.

10 Map Of Historic Trail Segments
The map is misleading. The inventory of the Overland Trail was begun in 1973 and I don't know that there has been any more information gathered. There were no protection measures taken on portions of the trail found intact in 1963. Therefore, the trail segments identified on the map are part of an incomplete inventory and since they were not protected, may not be intact at this time.

Thank you for the opportunity to comment. Please let me know if or how my comments will be addressed.

I sincerely hope that this document will provide effective and innovative opportunities for the management of the public lands.

Sincerely

/s/ Nina Trapp

Responses to Letter 3

1. The specified acreages are estimates based on our best available information. The text has been changed to indicate this in the proposed RMP.

2. Our authority to manage surface disturbance associated with mineral exploration and development is sufficient to protect cultural resources under most circumstances. Also please see general response 10.

3. Please see general response 3.

4. The characterization of the six intact segments of the Overland Trail as consisting of visible wheel ruts measuring less than 1.7 meters apart that are presumed to have been made by horse-drawn wagons was included for descriptive purposes. We are not implying that this was one of the criteria for eligibility to the National Register of Historic Places. The four criteria for eligibility, outlined in 36 CFR 60.4, are broad statements of significance. Guidelines for evaluating the significance of cultural resources under these criteria have been issued as BLM Manual supplement 8143, appendix 7. A copy of the BLM Manual supplement is available upon request. Also please see general response 3.

5. The information about the approximate routes of the Cherokee Trail was drawn from the cultural resource inventory files maintained at the Rawlins District office. As noted on page 103 of the draft RMP/EIS, this information indicates that the trail followed at least three routes. The locations of these routes will be identified and their condition clarified as additional inventories of trail segments are undertaken. The General Land Office plats will be consulted at that time.

6. Thank you for the additional information. Also please see general response 3.

7. The cultural resources sections of this document were prepared with the use of inventory data maintained in files at the Rawlins District office.

   Regardless of the alternative under which the disturbance would occur, the standard protection measures outlined in the Cultural Resources/Natural History appendix to the draft RMP/EIS will mitigate most adverse effects on cultural resources that would arise from surface-disturbing activities. The information from inventories that accrues as the result of surface-disturbing activities has provided us with useful information that reflects the cultural resources in the planning area, and it will continue to do so. Although the information collected as a result of surface-disturbance mitigation may be incomplete with respect to culturally homogeneous areas, it is not erroneous.

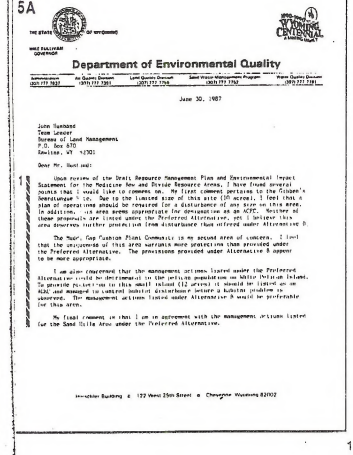
   It is our intent not only to address the inherent value of the cultural resources within the planning area through this plan but to identify strategies through which these resources can be managed within the context of multiple use.

8. As outlined in the Cultural Resources/Natural History appendix to the draft RMP/EIS, the assignment of cultural resource properties to specific use categories reflects decisions pertaining to the management of those resources. These decisions are implemented through activity plans prepared in accordance with the BLM planning process, which is described in general response 2.

9. The pertinent legislation is as follows: the American Antiquities Act of 1906; the Recreation and Public Purposes Act of 1926; the Historic Sites Act of 1935; the Reservoir Salvage Act of 1960, as amended by Archeological and Historic Preservation Act of 1974; the National Historic Preservation Act of 1966, as amended; the National Environmental Policy Act of 1969; Executive Order 11593; the Federal Land Policy and Management Act of 1976; the American Indian Religious Freedom Act of 1978; and the Archaeological Resources Protection Act of 1979.

10. The inventory of intact Overland Trail segments actually began in 1976 and is an ongoing effort. Field inspections of the segments identified in this plan will be conducted before the lands surrounding the segments are actually segregated from mineral location if the condition of one or more of these segments has deteriorated to the extent that it can no longer be considered intact, withdrawal of the lands surrounding that segment will not be pursued.

5A



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Administration (307) 777 7937 | Air Quality Division (307) 777 7391 | Land Quality Division (307) 777 7756 | Solid Waste Management Program (307) 777 7752 | Water Quality Division (307) 777 7781

June 30, 1987

John Hamband
Team Leader
Bureau of Land Management
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Hamband:

1 Upon review of the Draft Resource Management Plan and Environmental Impact Statement for the Medicine Bow and Divide Resource Areas, I have found several points that I would like to comment on. My first comment pertains to the Gibbon's Beardtongue Area. Due to the limited size of this area (80 acres), I feel that a plan of operations should be required for any disturbance in this area. Therefore, this area would not be available for mineral location under the ACEC. Neither of those proposals are listed under the Preferred Alternative, yet I believe this area deserves further protection from disturbance than offered under Alternative D.

The Major Cap Fusion Plant Community is an second area of concern. I feel that the uniqueness of this area warrants more protection than provided under the Preferred Alternative. The provisions provided under Alternative B appear to be more appropriate.

I am also concerned that the management actions listed under the Preferred Alternative could be detrimental to the pelican population on White Pelican Island. To provide protection to this small island (12 acres) it should be listed as an ACEC and managed to control human disturbance before a habitat problem is observed. The management actions listed under Alternative B would be preferable for this area.

My final comment is that I am in agreement with the management actions listed for the Sand Hills Area under the Preferred Alternative.

Herschler Building 4 122 West 25th Street 4 Cheyenne, Wyoming 82002

5B

To: John Hamband
Page 2, 1987
Page 2

Thank you for the opportunity to provide comments on this Draft Resource Management Plan/EIS.

Sincerely,

Roger W. Smith
Plan Evaluator
Land Quality Division

RWS:bhs
cc: Greg Smith
Susan Dove

Response to Letter 5

1. The proposed plan in chapter 2 contains a discussion of management direction and intent for all areas considered for ACEC designation and the rationales for the proposals as to which areas would be designated ACECs. Although not proposed for ACEC designation, the Gibben's beardtongue area would be withdrawn from locatable mineral location under the proposed RMP.

6A

Continental Divide Trail Society

P.O. BOX 30002 BETHESDA, MD 20814

June 30, 1987

Mr. John Husband
Team Leader
Bureau of Land Management
Rawlins District
P.O. Box 670
Rawlins, Wyoming 82301

Dear Mr. Husband:

We submit these comments on the Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas.

1 Our concern relates to the Continental Divide National Scenic Trail. It is our understanding that the CDNST would be developed in accordance with subsequent activity planning. We trust that this process would be carried out with public participation and comment; please note our desire to work with you at all stages of the activity planning. However, there seems to be no schedule for your efforts in this area; the present RMP should set some sort of goal - perhaps five years for the location and designation of a particular route.

While we will reserve specific recommendations until the activity planning phase, we do note with approval the plans to give priority attention to securing improved access to the Atlantic Rim, Ferris Mountains, and Miller Hill. The existing opportunities for such access, please give special attention and weight to transactions that might facilitate the routing of the Continental Divide Trail.

We agree with the stated aim of benefiting the CDNST through visual resource management. The proposed Class I designation for the Ferris Mountains is well deserved. Other areas along the CDNST should also receive Class or Class II VRM, though specific decisions are perhaps best left until the activity planning phase.

2 There are many ponds in the dunes at the east end of the Ferris Mountains. September finds them full of waterfowl. This very unusual area, which may well turn out to be a rewarding part of the CDT, should be managed to maintain the natural environment. The proposal to encourage ORV activity at the "Dune Ponds" should not be approved at the expense of other wildlife or recreation values.

Responses to Letter 6

1. See general response 2. After the RMP is approved, a RAMP will be developed for the Continental Divide National Scenic Trail as the activity planning tier in the BLM planning system. We will make every effort to include the public in the development of our management and designation strategy for this trail. The RAMP will set a schedule for locating and designating specific route segments. Some segments will take longer to designate than others (for example, routes through the checkerboard), so establishing a schedule in this RMP would be impractical.

2. The part of the Dune Ponds area that would be open to ORV use is adjacent to the road leading to Seminoe Reservoir (Carbon County road 351). This designation has been clarified in the proposed RMP, and a new map is included in this document to show the location of the area (map 33). The ponds to which you refer are several miles from those described above.

3. Please see the response to comment 5 of letter 3.

4. The large folded map in the draft RMP/EIS showed areas considered for ACEC designation in one or more alternatives. Under the proposed RMP, one of the areas you mention, a portion of the Atlantic Rim area, would be included in the Jep Canyon ACEC.

6B

Mr. John Husband June 30, 1987

3 The recognition of historic trails is appropriate. One could add to the list other historic routes as well - those of Ashley and Fremont, for example. But we are especially interested in the Cherokee Trail and the basis for its route as depicted in Map 17: have you included your information source in the list of references? (The Forest Service's Comprehensive Plan for the Continental Divide Trail, and perhaps volumes 3 and 4 of our Guide to the Continental Divide Trail should also be included in the References.)

4 The large folding map identifies ACEC's at Atlantic Rim, Brown Canyon Rim, and Platte Divide. We support each of these proposed ACEC's, the designation of which might also facilitate location of the Continental Divide Trail. The table of alternatives (Table 1) should be amended to include these ACEC's in accordance with the folding map. (We would also note our support for wilderness designation for the Ferris Mountains WSA - even though we understand this to be beyond the scope of the present action.)

Please keep us informed about further planning efforts and decisions affecting the Divide Resource Area and let us know if we can provide additional information pertinent to the comments above.

Sincerely,

James R. Welt
Director

7

EQUITOUR

Richard Fox
[illegible]

5 July 1987

Dear Mr. Husband,

1 Thank you for inviting me to comment on the Draft Resource Management Plan. I do not have time to comment in detail, but I want to tell you how important I feel the recreational aspects of the area are potentially. I am convinced that recreation will be a very rapidly increasing factor in your considerations.

We are most pleased to have been able to start running the Dino Express Ride this year through the country between Steamboat Springs and South Pass City and we expect to do a great deal more of it in the future. This is a beautiful, unspoiled area rich in history and we are always giving it warm, positive appreciation. It can contribute nothing from the land and in all considerable economic value to locals as well as giving a great deal of enjoyment to many people.

I favor as much wilderness and as much protection as possible of the unspoiled aspects of the country. The enhancement of wildlife habitat would help as people derive much pleasure from observing it. Everything of historical value should be preserved and highlighted. You have a national treasure in your keeping and I hope you will never allow it to be destroyed for short term gains.

Sincerely,

Richard Fox

P.S. See pages 22 and 24 of brochure

Response to Letter 7

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Also please see general response 1.

Response to Letter 8

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

8

United States Department of Agriculture

Soil Conservation Service

Room 1124, Federal Building
100 East B Street
Casper, Wyoming 82601

June 29, 1987

Mr. John Husband, Team Leader
Bureau of Land Management
P.O. Box 670
Rawlins, Wyoming 82301

Dear Mr. Husband:

1 The Soil Conservation Service in Wyoming has no comment on the alternatives presented and on the adequacy of the impact analysis for the Medicine Bow and Divide Resource Areas.

We did appreciate the opportunity to review the Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) for the areas.

Sincerely,

Thomas Dewitt, Acting
FRANK E. SIDERIUS
State Conservationist

The Soil Conservation Service is an agency of the Department of Agriculture

9A

DEPARTMENT OF THE AIR FORCE

9 July 1987

Mr. Hilliary A. Oden, State Director
U.S. Department of the Interior
Bureau of Land Management
P.O. Box 1828
Cheyenne, Wyoming 82003

Dear Mr. Oden

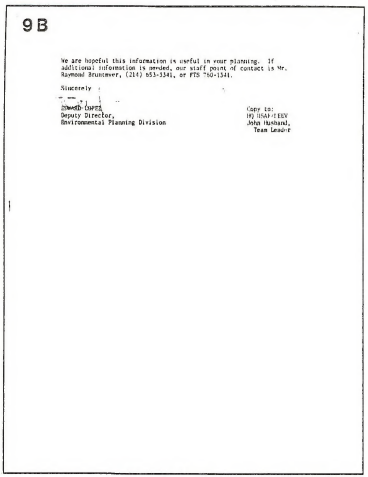
1 Thank you for allowing us the opportunity to review the Draft Resource Management Plan/Environmental Impact Statement and Wilderness Supplement for the Medicine Bow-Divide Resource Areas, Wyoming.

We continue to express our support of the BLM in developing functional management plans for lands under its control. The Air Force concern for resource management issues contains the need to retain use of existing and the establishment of future military flight training areas and routes which may traverse these areas.

Currently several Air Force air operations including instrument flight training routes traverse the Medicine Bow Resource Area portion of the study area. Specifically, IR 414 and IR 418, 541 and 542 traverse this portion of the study area. Although flight training areas, routes, and airspace requirements of the military are subject to change and do change frequently, it is not anticipated that new routes will be established in the immediate future. In addition you need to be aware of the approach/departure routes once and from F.E. Warren AFB as shown on your maps in the vicinity of Cheyenne, Wyoming.

Mission requirements, fuel costs and environmental constraints determine the decision to train military training activities. Because of general aviation and population parameters, low level high speed flights are relegated to areas which are least accessible and sparsely inhabited. Therefore, we request that you give full consideration to how planning and management decisions made by your agency may adversely affect or restrict use of low altitude airspace by the military. Our Air Force position on this matter is based on the high training and readiness values rendered by use of this low altitude airspace.

We are aware of your fire suppression activities requiring the use of aircraft; therefore, our flight operations continued to remain alert for your fire suppression activities especially during the normal fire season and they are directed to avoid such activity by at least 5 nautical (5.76 statute) miles.



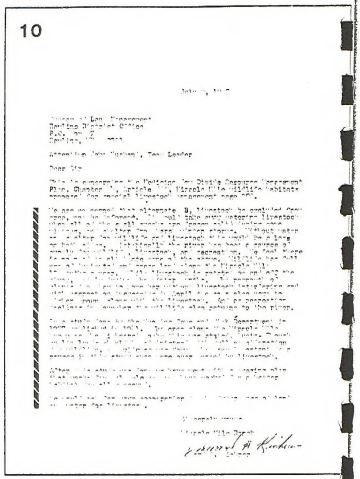
9B

We are hopeful this information is useful in your planning. If additional information is needed, our staff point of contact is Mr. Raymond Brunsmeyer, (214) 653-1341, or FTS 750-1341.

Sincerely,

Edward D. Dartt
Deputy Director,
Environmental Planning Division

Copy to:
HQ USAFE/DEEV
John Husband,
Team Leader



10

Response to Letter 9

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. We will continue to coordinate with the Department of the Air Force regarding our fire suppression activities that require the use of aircraft.

Response to Letter 10

1. Livestock grazing would not be excluded from the Miracle Mile under the proposed RMP. Instead, we would give special attention to livestock grazing management to maintain wildlife habitats along the Miracle Mile. We will continue to work with you in this direction.

11A

United States Department of Agriculture

Forest Service

Medicine Bow National Forest
605 Skyline Drive
Laramie, Wyoming 82070

Reply to: 1920

Date: July 13, 1987

John Husband, Team Leader
Bureau of Land Management
Hawlins District
Box 570
Hawlins, WY 82501

Dear Mr. Husband:

After reviewing the Resource Management Plan and Draft EIS for the Medicine Bow-Divide Resource Areas, the following comments are offered for your consideration.

1 1. The symbols for the Laramie Peak Old Cows Winter Range and the Cyrille Deer Winter Pasture on the legend for the Land Status and Grazing Allotment Boundaries map are reversed.

2 2. Page 15, para. 1 - States, "Consideration should be given to watershed....." It would be helpful to include what the consideration is for those areas, especially since the Vick big cows unit is of such a sensitive nature to the Wyoming Game and Fish Department. In addition, the areas listed in this paragraph are not shown on the ACEC map, which may be helpful to locate them.

3 3. Map 16, page 86 - This map shows the OFF-Road Vehicle Designations for the planning area. It seems that some of the ACEC areas and important game areas, such as the Vick Unit, should have some kind of ORV restrictions. Was the Wyoming Game and Fish Department consulted directly for input regarding some of their important management areas?

4 4. Figure 4, page 86 - It is not very clear what this map intends to depict. Some explanatory dialogue would be helpful.

5 5. Map 20, page 105 - This map shows Forest Lands with the Potential for Intensive Management. Many of the highly

FS-6200-2007 (2/83)

11C

10

1920 Mr. Husband: Page 3

for the various programs listed in Chapter Four conclude by stating "Management actions for the following programs or resources will have virtually no effect on...." As described in 6 above, this statement may not be entirely accurate for all the program assumptions, and additional discussion may be necessary.

We appreciate the opportunity to review and comment on the Draft EIS for the Medicine Bow-Divide Resource Areas. If we can provide any additional assistance, please contact us.

Sincerely,

STEPHEN MIELSEN
Land and Resource Planner

SCH:pah

FS-6200-2007 (2/83)

11B

5

1920 Mr. Husband: Page 2

productive timber areas are adjacent to, or near, the boundary of the Medicine Bow National Forest (MBNF). Since the timber production level under this proposed plan is being increased, it will be important to coordinate all timber management activities between the two agencies.

6 6. Page 154 - Under Air Quality it states, "There are no Class I air quality areas in the planning area." The Savage Run Wilderness area on the Medicine Bow National Forest is a Class I area according to the Clean Air Act Amendments of 1977. Section 162(a)(2). This may have some implications for any management activities that could affect the air quality of these areas.

7 7. Page 217 - It states that management actions for the following programs will have virtually no effect on the forest resources under any of the alternatives. Certain livestock grazing as an example, for instance, if a clearcut may be scheduled for reentry, but not for the five to seven year requirement in the EIS for adequately restocking the unit cannot be met. The validity of this statement may be questioned; therefore, further analysis may be necessary.

8 8. Forestry Appendix, page 330 - This page states that it is BLM policy that stands will be adequately reforested within 5 years following harvest. On page 217 of the EIS, however, it states that clearcuts will be adequately restocked within five to seven years. In this an attempt to be more in compliance with MBNF? If not, a concern may arise that the five to seven year period may be long enough if your agency has determined that 5 years is the optimum period for reforestation.

9 9. Forestry Appendix, page 330 - Pile and burn is discussed as one of the methods of slash treatment. An analysis was done on the MBNF, and it was determined that pile and burn is one of the least desirable methods of slash disposal. Piling tends to reduce productivity of the overall site by concentrating topsoil in the piles, which is detrimental where the topsoil is thin to begin with. Burning the piles usually creates enough heat so that the soil is virtually sterilized, which can potentially limit vegetation growth for many seasons. This results in reducing the land base for timber production. The MBNF has found that roller chopping is generally the most effective method of site preparation. The larger material may be used for firewood collectors, or even prescribed for firewood cutting areas.

10 10. Section 102(C), (i) - (v) of NEPA requires, "a detailed statement by the responsible official on--." Chapter Four of the EIS does not appear to adequately address the five sub-sections (i-v) of Section 102. Many of the assumptions

FS-6200-2007 (2/83)

Responses to Letter 11

1. You are correct. Thank you for bringing this to our attention.

2. The section to which you refer is a part of our planning criteria. Planning criteria are not management prescriptions or proposed management actions; rather, they serve to focus our planning effort on the issues. The considerations for the areas listed are included in the proposed RMP in the management actions for wildlife habitat, livestock grazing, and soils, water, and air.

3. ORV use would be limited to existing roads and trails over the entire planning area. Areas are proposed for more intensive management where known resource conflicts warrant such action and where stricter limitations would help resolve the conflicts. These areas include the Sand Hills area, the Dune Ponds area, and the West Seminoe area. If other areas are identified as problem areas in the future, those problems will be addressed.

   We have consulted with the Wyoming Game and Fish Department regarding that agency's important management areas.

4. Figure 4 is intended to clarify the nonadditive, overlapping acreages listed under "Leasable Minerals—Oil and Gas" on pages 51 and 52 and "Locatable Minerals" on pages 55 and 56 in the draft document. Simply adding the listed acreages would equal a larger acreage than would actually be affected. The totals shown in the figure take the overlap into account.

5. We will continue to coordinate our timber management activities with the Medicine Bow National Forest. This will include annual coordination meetings and solicitation of your input into the environmental assessments for proposed forest management activities on public lands near the forest boundary.

6. Thank you for bringing this to our attention. In chapter 3 of this final document, under "Additions and Corrections to Soil, Water, and Air Resources," we have added the information that the Savage Run Wilderness Area is classified as a Class I area by the state of Wyoming.

7. Regeneration in harvested areas being retarded by livestock grazing has not been a problem in the past and is not expected to be a problem in the future in the planning area. If livestock were to become a problem in a specific area, there are several options that could alleviate the situation, including fencing, planting, and/or adjusting the amount of livestock use. Also please see general response 3.

8. The five to seven year period mentioned on page 217 was an assumption used to analyze impacts. This figure was based on our past experiences in regenerating harvested areas. The 15 years discussed on page 327 was a statement of policy. In this planning area, we expect that clearcuts will continue to be adequately restocked more quickly than required by policy.

9. Pile and burn is one of several slash disposal and site preparation methods available for use in this area. We have employed roller chopping in some areas in the past and will again in the future. We recognize the impacts associated with the pile and burn method of slash disposal and we analyze these potential impacts in the EA for a particular timber sale. We also realize that roller chopping may not be desirable in certain circumstances such as heavy slash accumulations or when potential purchasers do not have the necessary equipment.

10. The five subsections of NEPA that you refer to are included in the discussion of environmental consequences where applicable; however, they are not covered under separate subheadings. Also please see general response 3.

Response to Letter 12

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

12

[This handwritten letter has been typed verbatim for better readability.]

5915 W 59st
Chicago Ill
60638

Dear Sir

1 Please pass and make more wilderness in the national forest. only will so much energy sights and that is all. and pass a plain to cut down more trees and plants more. all we stock up the rivers the lakes is with fish and to stop waste land. made by strip mines. with fines. if energy businsss does not fix them up. all so, please pass laws to help to save. the wolves the eagles the mountain lion and the elk. the black bear and the lynx and bibcat. all so a plain, to make a 1 million acre national park. in the Wyoming red Desert. to save the 150 foot high sand dunes the mountains of sand hills Badlands and old trails to all so a land of hunters and wild life like elk antalope mule dear to

pass this

1 mild rain hill
2 clean air and water bill
3 the red Desert national park
4 wilderness bill
5 a plain to control and to stop over mineing
6 a bill to help to save the wild life to

/s/ Larry DiBrito

1 give ranchers grazing land cant free
2 stop taxes on grazing land use for the ranchers
3 tax all gas coal businsss more
4 raise up energy land prices sales.

/s/ Larry DiBrito

13

[This handwritten letter has been typed verbatim for better readability.]

5915 W 59st
Chicago
Ill
60638

Dear Sir

1 please do this
1 pass and make the river canyon wilderness
2 pass wilderness amendment
3 stop over mineing
4 pass and make the red Desert national park
5 please help the ranchers
6 wild life bill
cut oil gas and coal mines clean up the air the water and the soil and make more wild life refuges wild life rangers and help the ranchers to

/s/ Larry DiBrito

Response to Letter 13

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

14B

Mr. Tom Zale
Page 2
July 28, 1987

and private organizations such as OCTA (Oregon California Trails Association). This all costs us a staggering amount of money--of course tax payers' expense. OCTA wanting more and more money from members, and BLM sending out a "Gift Catalog." From my experience at least, there is more evidence that BLM is accomplishing more than most of the rest.

2 Number Three: Recently I received a BLM report on "Location, Access, Ownership, and Condition of Trail and/or Stage Station." Under the heading, Access, with very few exceptions, "NO PUBLIC ACCESS was listed. To the historian this is devastating information. It sounds like an absolute impossibility to be able to get into these historic areas. I wrote BLM, Cheyenne Office, to explain to me this categorical listing. My letter was forwarded to the Rawlins District office and I received an answer from Mr. Vine Kerns telling me the category means just what it says, "No Public Access." Actually across the Bitter Creek area there are no "Stop" or no "No Trespass" signs on the Overland Trail sites in that location. I suppose one could contact each land owner listed there but everyone is using their roads now and there is nothing to mark but scrub sage, grease wood, and prairie. BLM has protected several sites from cattle rubbing the building stones and trail markers down. There, of course, can be vandalism and it seems only "the Rock" has been recent names and dates carved into it but no overt overpowering work and it is framed, sad but true.

I wish instead of bluntly stating "Forest" BLM would include the information that "NO GATES" means you could try contacting land owners; they are listed in the same BLM publication and I am pretty sure any reasonable request will be granted. Some BLM publication and I am pretty sure any reasonable request will be granted. The Black Butte Station--by the town by phoning the Black Butte Coal Co. Rock Springs office. Make an appointment. They provide a most interesting guided tour. Some ranchers are proud to show the preservation efforts they have made over the years. They have been real questioners of the treasured remains of the Great Migration era. Over-all, my first plain-jane "no" but there are many sites to see if you'll just ring or rap and get the idea of the whole picture of the Overland Trail through Wyoming.

Sorry I won't be able to attend the public meeting in Laramie in August. Will a report follow?

Sincerely,

Ann Bruning Brown

cc: Mike Karbs
John Hutchins
Richard Rastin

14A

1358 North 10th Street
Laramie, WY 82070
July 28, 1987

Mr. Tom Zale
BLM District Archaeologist
Rawlins, WY 82301

Dear Mr. Zale:

In a letter recently address to "Participants" from Mr. Richard Rastin, District Manager's office in Rawlins, asking for input on various and sundry subjects I have only a few select areas that I know anything about.

Number One: I have been trying to get the Overland Emigrant Mail and Stage Trail recognized on the National Register of Historic Trails. Many sites through this part of Wyoming are as of now on the National Register. I am attaching the agenda used on a field trip of the Overland Trail July 12 through 17, 1987, conducted by the University of Wyoming. There was not one historic location where the class was not able to get into, not only to see the remains at each one but the ranchers were gracious in guiding tours and explaining events of historic value.

In the "checker board" land ownership in the Bitter Creek area there are hundreds of unmarked roads and there seems to be no "no trespassing" signs up anywhere. Oil field trucks and equipment seem to be every where coming and going. Why is it listed No Public Access?

Wasn't there at one time and maybe now, something called "Protection by Territorial Rights?" If so, why aren't old established trails open to the public so people can travel over them?

1 If nothing else, isn't there some way that ranchers can be approached for land swaps for trail space across to such areas as Wamsutter (Washakie) Station and west across to the Bitter Creek area stations? Bridger Pass road was such a deal wasn't it? I would like to see the old "Bridger Pass" location (cabin) acquired by either BLM or the State of Wyoming for preservation before it is too late.

Number Two: I am making these suggestions from the information found on page 2:...Medicine Bow Divide, Resource Areas, Management Plan and Environmental Impact Statement:

It seems to me there is a no ending "struggle" to do something about preservation of historic sites. There is evidence of "overlapping over lops" of effort between Wyoming State Preservation Offices, the BLM, the National Park Service, Wyoming State Engineers Office (year after year of surveying and map making)

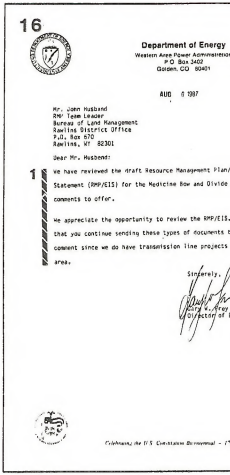
Responses to Letter 14

1. The old "Bridger Pass" location (cabin) was one of the properties containing cultural resource values that was considered for acquisition, as described on page 27 of the draft RMP/EIS. Although we recognize the significance of this property, the planning area contains more than 5,000 known cultural resource properties on public lands. Many of these also are significant and demand our management attention. Therefore, acquisition of additional properties would not be an effective function of the cultural resource management program in the planning area at this time. Instead, the program will focus on more effective management of cultural resource properties already on public lands.

2. "No public access" means that there is not a public road or easement to a site or through private land, so that to visit a site on private land one would need to get the landowner's permission to be on his or her land. "No public access" should not be construed to mean that the private landowners are unwilling to allow interested persons onto their land to visit historic sites. As you mentioned, many landowners are extremely proud of the historic features on their land and their efforts to preserve them.

   The Overland Trail passes through the checkerboard as it goes through the planning area. There may be sites on public land that are not accessible without crossing private land. Again, unless there is a public road or easement through the private land, a visitor would need to contact the private landowner to get permission to cross his or her land to reach public land.

16



Department of Energy
Western Area Power Administration
P.O. Box 3402
Golden, CO 80401

AUG 6 1997

Mr. John Husband
RMP Team Leader
Bureau of Land Management
Rawlins District Office
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Husband:

1 We have reviewed the draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) for the Medicine Bow and Divide Resource Areas and have no comments to offer.

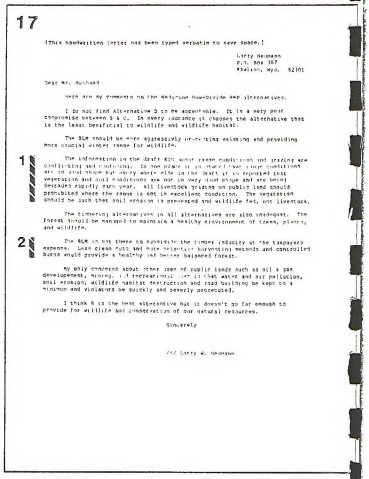
We appreciate the opportunity to review the RMP/EIS. We would like to request that you continue sending these types of documents to us for review and comment since we do have transmission line projects located in the general area.

Sincerely,

Jerry K. Fray
Director of Environmental Affairs

Celebrating the U.S. Constitution Bicentennial - 1787-1987

17



[This handwritten letter has been typed verbatim to save space.]

Larry Hansen
P.O. Box 307
Rawlins, Wyo. 82301

Dear Mr. Husband

Here are my comments on the Medicine Bow-Divide RMP and alternatives.

I do not find Alternative D can be acceptable. It is a very poor compromise between B & C. In every instance it changes the alternative that is the least beneficial to wildlife and wildlife habitat.

The BLM should be more aggressively converting existing and providing more crucial winter range for wildlife.

1 The information in the draft EIS about forest conditions and grazing are conflicting and confusing. In one place it is stated that some conditions are in good shape but nearly every where else in the draft it is reported that vegetation and soil conditions are poor in very bad shape and are being damaged greatly each year. All livestock grazing on public land should be prohibited where the range is not in excellent condition. The vegetation should be such that soil erosion is prevented and wildlife fed, not livestock.

The timbering alternatives in all alternatives are also inadequate. The forest should be managed to maintain a healthy environment of trees, plants and wildlife.

2 The BLM is not there to subsidize the timber industry at the taxpayers expense. Less clear cuts and more selective harvesting methods and controlled burns would provide a healthy and lasting balanced forest.

My only concerns about other uses of public lands such as oil & gas development, mining, ect especially ~~on~~ in the water and air pollution, soil erosion, wildlife habitat destruction and road building be kept to a minimum and violations be quickly and severly prosecuted.

I think B is the best alternative but it doesn't go far enough to provide for wildlife and preservation of our natural resources.

Sincerely

/s/ Larry W. Hansen

Response to Letter 16

1. Thank you for taking the time to review the draft RMP/EIS.

Responses to Letter 17

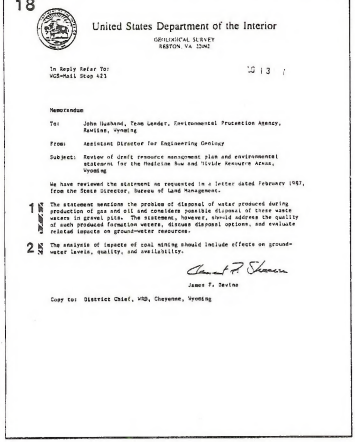
1. Please see general response 6.

2. Controlled burning is one method that could be used to renew old stands of diseased timber if that was the primary goal. The major tree species that would be harvested under this RMP is lodgepole pine. This tree is specialized by nature to become established after wildfires.

   Depending on their size and intensity, wildfires subsequently remove all the existing vegetation. The conditions created from clearcutting are similar to those created by wildfires and allow for regeneration of lodgepole. In addition to helping establish new, healthy stands, harvesting the timber provides wood products for human needs. If proper procedures are followed, clearcutting is an environmentally sound and cost-effective form of achieving multiple-use forest management objectives.

   Controlled burns are being considered for use to improve the health of aspen stands. While we do not have any specific areas scheduled for treatment at this time, controlled burning is an option we will consider, particularly for wildlife habitat improvement projects.

   Since lodgepole pine is used for wood products in the planning area, it is possible to practice clearcutting for this species. However, no significant markets have been developed for aspen. This is the major reason that controlled burning is considered for aspen but not for lodgepole pine.



18

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA 22092

In Reply Refer To:
WSS-Mail Stop 423

Memorandum

To: John Husband, Team Leader, Environmental Protection Agency, Rawlins, Wyoming

From: Assistant Director for Engineering Geology

Subject: Review of draft resource management plan and environmental statement for the Medicine Bow and Divide Resource Areas, Wyoming

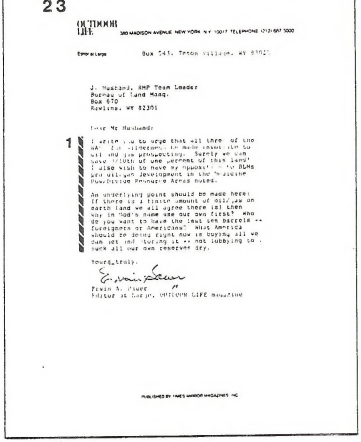
We have reviewed the statement as requested in a letter dated February 1987, from the State Director, Bureau of Land Management.

1 The statement mentions the problem of disposal of water produced during production of gas and oil and considers possible disposal of these waste waters in gravel pits. The statement, however, should address the quality of such produced formation waters, discuss disposal options, and evaluate related impacts on ground-water resources.

2 The analysis of impacts of coal mining should include effects on ground-water levels, quality, and availability.

James F. Devine

Copy to: District Chief, WSD, Cheyenne, Wyoming



23

LIFE 541 MADISON AVENUE NEW YORK N.Y. 10017 TELEPHONE (212) 687-3000

Box 541, Teton Village, WY 83025

J. Husband, RMP Team Leader
Bureau of Land Mgmt.
Box 670
Rawlins, WY 82301

Dear Mr. Husband:

1 I write now to urge that all those of the BLM [illegible] in made aware of the will and the generosity. Surely we can have both of the percent of this land. I also wish to have my opposite [illegible] any oil-gas development in the Adobe Townsite Recreation Area [illegible].

An underlying point should be made here: If there is a finite amount of oil/gas on earth land we all agree there is] then why in God's name are we not [illegible] first? Who do you want to have the last ten barrels -- foreigners or Americans? What America should be doing right now is buying all we can get and [illegible] it -- not pumping it -- back all our own reserves dry.

Yours truly,

Erwin A. Glikes
Editor at Large, LIFE

PUBLISHED BY TIME MIRROR MAGAZINES, INC.

Responses to Letter 18

1. The proposed RMP does not include consideration of possible disposal of water produced during oil and gas activities in gravel pits. Disposal of produced water is regulated by the BLM under 43 CFR 3160 and by agencies of the state of Wyoming. Also please see general response 3.

2. Please see general responses 2 and 3. The effects of coal mining on groundwater levels, quality, and availability are addressed in the draft RMP/EIS as appropriate for the RMP tier of the BLM planning system. Past environmental analyses and studies have shown that mining in any of the areas would not have significant effects on water quality if mining was done properly.

   The areas described in this document are those that would receive further consideration for coal leasing in the future. Site-specific environmental analyses would be conducted before any of the areas would be leased or mined.

Response to Letter 23

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Also please see general response 1.

25A

Mr. John Rusband, Team Leader
Bureau of Land Management
Rawlins District
P.O. Box 670
Rawlins, Wyoming 82301

c/o W.S.T.S.
Lander, WY 82520

August 19, 1987

Dear Mr. Rusband:

1 Thank you for the opportunity to review and comment on the Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas. My comments will be restricted to the American white Pelican (Pelecanus erythrorhynchos) nesting colony site at Pathfinder Reservoir which was discovered in 1984 (please see enclosed paper). I fully support having the entire white pelican nesting island designated as an Area of Critical Environmental Concern (ACEC) for the following reasons.

First of all, there is national concern for the population status of the American White Pelican throughout its range. Breeding populations of white pelicans have declined dramatically in north America. Historically, twenty-four pelican colonies existed west of the Rocky Mountains. Now there are four about which we have any knowledge. There may be fewer than two hundred breeding pairs in the entire United States. Due to the limited number of breeding localities, the white pelican (western population) has been identified as a "sensitive species" by the U.S. Fish and Wildlife Service. Sensitive species are defined as vulnerable or declining species, subspecies, or distinct populations that could become federally listed as endangered or threatened in the foreseeable future, throughout all or in a significant portion of their ranges, without active management or removal of threats." Major reasons for the population decline of white pelicans have been human disturbance of nesting colonies, habitat loss, including loss of nesting sites and foraging areas, and illegal shooting. Contamination by pesticides also may have contributed to the decline.

Secondly, concern exists in Wyoming for current breeding population levels of American White Pelicans. The Wyoming Game and Fish Department classifies the white pelican as a "Priority I" species which means that it needs immediate attention and active management to insure that extirpation or a significant decline in the breeding population in Wyoming does not occur. If Wyoming had an official state list of threatened and endangered species the white pelican would be on it.

25B

Finally, the nesting island at Pathfinder Reservoir is probably the most unique and important breeding area for colonially nesting waterbirds in Wyoming. In addition to providing critical nesting habitat for the largest white pelican breeding colony in the state the island also supports nesting Great Blue Herons, Double-crested Cormorants, California Gulls, and Caspian Terns. The Pathfinder Reservoir site is the only known area where Caspian Terns currently nest in Wyoming. The Wyoming Game and Fish Department has also designated the Caspian Tern as a "Priority I" species.

Although additional research is needed on white pelicans nesting at Pathfinder Reservoir, the continued existence of the nesting colony is currently threatened by several factors. Probably the major threat to the white pelican breeding population at Pathfinder Reservoir is human disturbance of nesting birds on the island. Other serious threats include erosion of Bird Island, formation of a land-bridge between Bird Island and the mainland, and loss of foraging habitat. Please see the enclosed management recommendations which I suggest be implemented to ensure protection and long-term maintenance of the pelican nesting population at Pathfinder Reservoir. If implemented, the management strategies would also benefit the other colonially nesting waterbirds on Bird Island.

My not designating the Pathfinder Reservoir nesting island as an ACEC the Bureau of Land Management is failing to demonstrate that they recognize the special values of the colony site and that management actions will be required to ensure the long-term maintenance of the nesting colony of white pelicans and other waterbirds. Please let me know if you would like additional information.

Sincerely,

Scott L. Pindhot

Enclosures

Response to Letter 25

1. The white pelican island is Bureau of Reclamation acquired land, not withdrawn public land as was previously thought. ACEC designation would not enhance the BLM's ability to protect the nesting habitat, nor would it be appropriate when the land status is considered.

   The BLM would pursue a cooperative agreement with the Bureau of Reclamation and the WGFD for management of the island. The BLM has some capability to initiate habitat improvements on the island and public education efforts. A cooperative management arrangement would let other agencies use their abilities in the areas of public education, enforcement, and maintenance of reservoir water levels to provide suitable habitat for prey fish.

28

THE STATE OF WYOMING
MIKE SULLIVAN
GOVERNOR

1800-1890 WYOMING CENTENNIAL A LASTING LEGACY

WYOMING RECREATION COMMISSION

OFFICE OF THE STATE ARCHAEOLOGIST

August 24, 1987

Richard Bastin, Director
Bureau of Land Management
Rawlins District Office
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Bastin:

1 I recently read the cultural resource portions of the Medicine Bow-Divide BMP draft Environmental Impact Statement. There is one area of concern that I am unclear on: what is BLM's policy regarding treatment of archaeological property sites on split estate projects where the surface is private and the minerals are federal? What do you perceive to be the role of the federal government compared to the role of the private landowner? Since I know this is a difficult area in resource management, but it involves questions often asked of me by preservers and landowners alike. I would greatly appreciate your thoughts on the issue.

Thanks for your attention. I hope to see you on one of our excursions again.

Sincerely,

Mark E. Miller, Ph.D.
State Archaeologist

MEM/pmw

Response to Letter 28

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Please see general response 8.

   We believe that close coordination with private landowners on major projects is the best way to fulfill our legal obligations regarding cultural resources on split estate.

32B

Page 2
Medicine Bow RMP
August 15, 1987

The RMP's coverage of peralatan sepal yellowcress and its present situation is very well presented. The commitment to continue monitoring the plant is commendable. We feel the actions of coordination with the Bureau of Reclamation and the county weed and pest control districts, as included in the preferred alternative, should be sufficient at present to ensure the long term protection of this plant.

2 Since the Muddy Gap cushion plant community is such a unique assemblage of plants we feel the EIS should go beyond the preferred alternative to ensure its protection. Alternative 3 would be preferrable in that it withdraws the site from locatable mineral entry, thereby protecting it from possible limestone mining activities. If the possibility for damage from off-road vehicles exists then ORV's should be prohibited from using the site. We would also recommend no surface occupancy in all oil and gas leases for the site. This is another site that should be given careful consideration for ACEC status.

Riparian areas are perhaps the most severely impacted communities on public lands. They are also the sites which are generally capable of supporting and maintaining the highest levels of natural diversity in the arid west. Because of these concerns we would support alternative 3 which proposes the maximum improvement for riperian areas.

Again we thank you for the opportunity to comment on the RMP and commend you on the fine job done on the rare plants and communities included. For your information and use we will be sending you a list of additional sensitive species identified by the Wyoming Natural Heritage Program.

Sincerely,

Bernie Hall

Bernie Hall
Mont./Wyo. Land Steward

32A

The Nature Conservancy

August 19, 1987

Big W. Field Office
Plaza Bank Bldg.
Fort Collins, Colorado
P.O. Box 350
Wilson, Wyoming 83014
(307) 733-4301

John Husbend, Team Leader
Bureau of Land Management
Rawline District Office
Box 670
Rawline, WY. 82301

Dear John:

Thank you for the opportunity to comment on the Medicine Bow-Divide draft RMP.

As you may know The Nature Conservancy is dedicated to preserving natural diversity around the globe. We set about accomplishing this goal through the protection and preservation of species that are rare, some on the verge of extinction. We identify these species through state heritage programs that set about protecting them through various means, one of which is cooperation with federal agencies responsible for the management of public lands containing these special elements.

We commend the BLM's commitment to preserving and monitoring the populations of Gibbon's beardtongue (Penstemon gibbensii) and persistent sepal yellowcress (Rorippa calcinal), and the Muddy Gap cushion plant community. It is also encouraging to read of your intentions for further coordination with The Nature Conservancy for the monitoring of these elements.

1 Gibbon's beardtongue is quite rare having only two known occurrences globally. We feel it is of the highest priority to protect this occurrence from any possible threat. Not only should the 10 acre population itself be protected but as should any surrounding areas that may be critical habitat for the population. With this objective in mind we would recommend that the site be withdrawn from mineral entry (even though the development potential is low) and that a no surface occupancy stipulation be used for oil and gas leases. The objective shown under alternatives 2, 6, and 7, to maintain or enhance the population, should be adopted. These actions would be in audition to the BLM's present management activities protecting this plant. Since this plant is so rare and a valuable part not only of Wyoming's natural heritage, but to the natural diversity of the entire planet, we feel ACEC designation would be desirable.

Responses to Letter 32

1. Please see response 1 to letter 5.
2. As noted, the proposed plan in chapter 2 contains a discussion of management direction and intent for all areas considered for ACEC designation and the rationales for the proposals as to which areas would be designated ACECs. The Muddy Gap Cushion Plant Community would not be designated an ACEC under the proposed RMP. If the limestone in that area should be developed, unnecessary damage to the plant community could be presented without the special management attention afforded by ACEC designation. Also please see general response 10.

36A

United States Department of the Interior

BUREAU OF MINES

P. O. BOX 25086
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

Intermountain Field Operations Center

August 27, 1987

Memorandum

To: John Husband, Team Leader, Rawlins District Office, Bureau of Land Management, P.O. Box 470, Rawlins, Wyoming 82301

From: Chief, Intermountain Field Operations Center

Subject: Review of the Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas, Albany, Carbon, and Laramie Counties and portions of Sweetwater County, Wyoming

As requested, Bureau of Mines personnel have reviewed the subject reports regarding proposed management of four million acres of federal land and one million acres of split estate, including three wilderness study areas (WSA's) (11,095 acres), in southeast Wyoming. Our comments pertain to the discussion of mineral resources and assessment of impacts under the plan.

Four resource management alternatives are presented in the DEIS (pp. 24-96). Differences in mineral criteria are generally minor in the amount of acreage available for leasing or production of coal, uranium, and oil-gas leases. Acreage for locatable minerals would vary greatly between alternatives A and B (903,000 acres to 919,295 acres) and alternatives C and D (11,493 acres to 63,063 acres).

1 The sections that discuss mineral resources mainly concern widespread sedimentary type minerals such as coal and uranium known to exist and hydrocarbon leases that presume a potential for oil and gas sources. There is no mention of the high-potential mineral character of Forest Service areas, within BLM confines, near Encampment. At the turn of the century, the Encampment mining district in the Sierra Madre Mountains was a prominent copper producing district. In the medicine Bow National Forest a total of 1,500 mines and prospects, with renewed interest was demonstrated by Cannon Minerals Corp. when they drilled metamorphic rocks west of Encampment to test new mineral emplacement concepts. The EIS does not acknowledge the presence of the significant mineralization adjoining the BLM lands or consider the impact of future exploration or development of those mineralized areas. For example, access through the study area to the mineralized areas on forest land is not discussed in the document.

36B

2 The Bureau of Mines has planned, but as yet has not conducted, mineral land assessment studies of the WSA's in the resource area. Field studies are scheduled for Bennett Mountains, Encampment, and Prospect Mountain WSA's in 1987. Overall, we believe that subsequent versions of the document should more fully describe mineral resources near the BLM/Forest Service boundary and discuss how the management plan would affect future exploration and potential production efforts in the area.

Thank you for the opportunity to comment.

William Coolman

2

Responses to Letter 36

1. The right of reasonable access to mining operations is guaranteed under mining law. The need for access to lands in national forests is unpredictable; as any needs arise, access will be handled according to regulations. Also please see general response 8.

2. Please see general response 1.

37

BLM LANDS FOUNDATION
BOX 18 • PARK RIDGE, ILLINOIS 60068

August 26, 1987

Mr. John Husband, RMP Team Leader
BLM
Rawlins

Dear Mr. Husband:

I would like to commend you for the recent Draft RMP/EIS.

1 I do have one question re. the Wilderness part. Whatever happened to #030-305....
The Pedro Mountains?

Thank you for your help.

Very truly,

GEORGE EARLY

Response to Letter 37

1. The decision to include the Pedro Mountains as an area to be studied for wilderness suitability was appealed to the Interior Board of Land Appeals (IBLA). As a result of the IBLA ruling, the Pedro Mountains WSA was dropped from further study.

40A

DATE: AUG 27 1987

UNITED STATES GOVERNMENT

memorandum

REPLY TO ATTN OF: Division of Programs, Land and Minerals, Code 260

SUBJECT: Medicine Bow-Divide Resource Areas RMP/DEIS

TO: Director, Bureau of Land Management, Great Falls, Montana

FROM: Billings Area Director

1 This office has taken the opportunity to review the Resource Management Plan/Draft Environmental Impact Statement (RMP/DEIS) for the Medicine Bow-Divide resource areas.

This area is over 20 miles from the Wind River Indian Reservation and basically insulated from the reservation by the Antelope Hills and Green Mountains. As such, management of the watersheds, grazing, forest harvesting, minerals development, and other resources are not directly beneficial or detrimental to the Indian people.

However, one aspect inherent in all of the alternatives is disposal of public lands. Granted, public lands that is isolated is difficult to manage. Community expansion may also necessitate communities appropriating lands. However, public land quantity is shrinking, and land on which recreation activities can be performed is harder to find, especially near communities. This factor necessitates commuting to more distant areas for simple pleasures such as pot exercising, picnicing, off-road vehicle use, etc. Diminishing public lands can create more pressure on the recreation lands. This pressure can be manifested as historical or religious artifact destruction, wildlife and stock harrassment, more intensive focussed recreation land utilization, etc.

We strongly suggest that exchange and consolidation of public lands be the direction for "land disposal". In this manner, the land base does not shrink but is is also more manageable.

Alternative D appears to be a balanced management plan and, as such, we feel it is the most beneficial alternative. The exception to this plan is the proposed "land ownership adjustment" or "land disposal" as previously mentioned.

Retention of the lands, destined for disposal or exchange, leading to consolidation, will benefit the people of the United States now and in the future.

Great Falls Service Center
RECEIVED
AUG 31 1987

Great Falls, Montana

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

Response to Letter 40

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

40B

-2-

Thank you for the opportunity to comment on this RMP/DEIS. Questions or clarification requests can be directed to Mr. Richard J. Stefanic at (406)657-6195.

Sincerely,

Harvey E. Sorensen

RECEIVED
AUG 31 1987
Montana Wilderness Association

43A

August 27, 1987

Dear Sir:

1 In our society where progress is measured in dollars and the fact that our environment is being degraded by industrial concerns to the point that many areas are already unfit for human life and others are rapidly becoming so is politely ignored, it is not surprising that the most meager attempts to protect and preserve part of our world in its natural state are met with opposition. To preserve the wilderness study areas of the Encampment River Canyon, the Bennett Mountains, and Prospect Mountain, which altogether comprise a tiny .03% of the BLM holding in the resource area would seem a minimal amount of wilderness to preserve in so vast an area. But the BLM has seen fit to recommend only Prospect Mountain for wilderness designation.

I have spent many hours fishing in the solitude of the rugged Encampment River Canyon and have observed the diversity of wildlife there and the fragile nature of that ecosystem. To develop the area at all will be to destroy it completely as we now know it. I strongly urge the BLM to recommend it for wilderness status, along with the Prospect Mountain area. With 99.7% of the land in the resource area already developed, I do not think preserving the Encampment River Canyon in its natural state is unreasonable.

Also I would like to state my objection to the rampant use of off-road vehicles which is allowed on most BLM land. The raucous sound of these vehicles destroys all serenity and ruins the outdoor experience for everyone within miles around.

43B

Any measures to limit the use of these obnoxious vehicles which tear up the land as well as shatter the silence would be welcome by me, as well as, I think, by all other citizens who go to our forests and fields for a serene experience and not to listen to the very nerve-jarring sounds that we seek to escape.

I commend the BLM for recommending the Prospect Mountain area for wilderness designation. I again urge the BLM to recommend the Encampment River Canyon area for wilderness designation as well.

Sincerely,

Tom Higham

Tom Higham
817 Cherry Ct.
Rawlins, Wyo. 82301

Response to Letter 43

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

46

[This handwritten letter has been typed verbatim for better readability.]

4915 W 59 ST
Chicago Ill
60638

Dear Sir

1 and all of the sites that BLM not make it as new Wilderness land can be made in to new mountain state Parkes and you can make money off of camping Horse back riding and if there is a lake stream or river off of fishing and hooting Etc. and please Pass only so much oil sites gas sites and coal sites relase. only if all the oil sales land is used up and made back to the way it was, and after the use of oil coal and Gas. is used up there will be more energy sales on oil coal and gas.

The Red Desert must be saved so because it is Wyoming last Wounder, a land of Nole 150 Foot to 175 Foot sand Dunes old trails ballonts and Desert elk anti-elope mule deer mountain lion bould and goldden eagle to.

/s/ Larry DiPrito

Response to Letter 46

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

Response to Letter 59

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

59

[This handwritten letter has been typed verbatim for better readability.]

12195 NE 106 Ave
Portland
ORE. 97220
10 Sept 87

John Husband
RMP Team Leader
BLM, WY

Dear Sir,

1 Re, resource management plan for Medicine Bow/Divide Resource area. I urge wilderness designation of the following WSA's.

Encampment River Canyon
Prospect Mtn
Sawmill Mountains

I also want to comment negatively on the BLMS bias towards oil & gas development in the Medicine Bow/Divide resource Area.

Thankyou for your attention

/s/ Susan E. Cox

62A

[This handwritten letter has been typed verbatim to save space.]

7 September 1987
Laramie, WY

Mr. John Husband, RMP Team Leader
Bureau of Land Management
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Husband:

1 I am writing to urge you to recommend wilderness status for the Sawmill Mountains WSA, the Encampment River Canyon WSA and the Prospect Mountain WSA. 99.7% of the BLM land in this area already has roads or other developments. I don't think we can provide these few precious acres for preservation so that future generations in Wyoming may enjoy solitude and natural beauty. These WSA's are all located near the cities of Rawlins, Laramie and Encampment. As these cities grow in years to come their residents will need more and more wilderness to escape the pressures of urban life and to enjoy a diverse and important type of recreation. Countless studies have shown that the majority of wilderness use comes from local people, rather than out-of-state tourists. Small "pocket" wilderness areas located near urban areas like the three WSA's in question are therefore especially valuable.

In addition I must comment on the BLM's overall policy regarding oil and gas development in the Rawlins-Laramie-Encampment area. It is my understanding that the entire 50 million acres in the Rawlins area will be opened to oil and gas development. I think that this is inconsistent on the part of the BLM in light of the long term needs and interests of the people of Wyoming. I realize that we want jobs and economic development but the people of this state are going to be more impacted by extensive oil and gas development and longlong. Because recession inevitably ends we these leave us nothing but ravaged landscapes and excessive unemployment in the end. We can "ride high" on the crest of an oil boom while it lasts but what happens with the next bust in the energy market? Small scale ranching and farming, tourism and light manufacturing and farming, tourism and light manufacturing may not pay as well as mining or oil and gas but they don't take away from Wyoming's two greatest assets: the sense of community the people create and the state's scenic natural beauty. How much sense of community is felt by transient workers in a prefabricated "company town"?

Mr. Husband, I can't overemphasize the importance of long term thinking in managing scenery as valuable an Wyoming's natural heritage. I'm sure that a person in the field of natural resource management must share a love of wild places.

Please set aside the Encampment River Canyon, Sawmill Mountains and Prospect Mountains WSA's, just 1% of the land under BLM control, so that our

62B

children can see a small portion of the great natural beauty we once had in such abundance. Thank you for your time and attention.

Sincerely yours

/s/ Patrick Heaney
Middlefork Guard Station
Landeé, WY 82520

63

United States Department of the Interior
BUREAU OF RECLAMATION
Missouri Basin Region
P.O. Box 36900
Billings, Montana 59107-6900

IN REPLY REFER TO: MB-152a

SEP 11 1987

Memorandum

To: John Rathbun, Team Leader, Bureau of Land Management, Rawlins, Wyoming

From: Regional Environmental Affairs Officer, Billings, Montana

Subject: Review of Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas, Wyoming (DES 87/183)

1 We have reviewed the subject document and offer the following comments:

Pages 158 and 159, Table LAN-AP-1 - The report refers to 73,240 acres of land scheduled for withdrawal review. The withdrawal review has been completed. The report, which is in Washington, will not be acted upon until the suit brought by the National Wildlife Federation has been resolved.

Thank you for the opportunity to comment on this document. Should you have any questions about our comments, please contact Mike Ervin of my staff at (406) 657-6421.

cc: Commissioner, Attention: 150

4553

Response to Letter 62

1. Please see general response 1.

   There are approximately 5 million acres of federal mineral estate in the planning area. About 85% of the area is under oil and gas lease at any given time. Under the proposed RMP, the entire area would be available for oil and gas leasing with application of standard oil and gas stipulations to protect other resource values.

Response to Letter 63

1. The future withdrawal review mentioned in the footnote of table LAN-AP-1 is the remaining BLM responsibility of the review process. Those responsibilities have not yet been completed.

72A

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
RECLAMATION AND ENVIRONMENT
BROWN BUILDING
1005 PITT AVENUE
POST OFFICE BOX 1828
CHEYENNE, WYOMING 82003

In Reply Refer To:

1792M September 11, 1987

4111
0015.2

MEMORANDUM

TO: John Husband, RMP Team Leader
Rawlins District, Wyoming
Bureau of Land Management

FROM: Assistant District Manager
Resource Development
Federal Lands Branch
Western Field Operations

SUBJECT: Medicine Bow-Divide Resource Management Plan and Environmental Impact Statement (RMP/EIS)

We have reviewed the draft RMP/EIS for the Medicine Bow and Divide Resource Areas and are submitting several comments and suggestions (attached) for your consideration. We appreciate this opportunity to participate in the review of the document and look forward to seeing the final RMP/EIS when it is published.

If you have any questions concerning these comments or any other matter relating to the RMP/EIS, please feel free to contact Floyd McMullen in Denver at (303) 844-2401 or FTS 564-2401.

Attachment

Responses to Letter 72

1. The source of information for tables 13, 14, and 15 in the draft RMP/EIS is "Final Report: Baseline Climate and Air Quality for BLM Lands in Wyoming" (Rykaczewski, Ryne, Ewing, Smith, and Ogilaro 1980). This source is listed in the References section of the draft document. Since the source report was published in 1980, it appears that data were available only through 1977. We know of no more recent source of information.

2. The companies listed in tables 14 and 15 are emitting controlled emissions. The source of the information is the one specified in response 1 to this letter.

   Nonpoint emissions are difficult to trace to a particular company. Nonpoint air pollution from sources such as dust from roads and vehicle emissions are not from any one source. The general public also contributes through recreational activities, ranching, and other activities.

3. As is stated on page 23 of the draft RMP/EIS, the BLM will consult with the USFWS before projects that could potentially affect T&E species are permitted. This includes endangered fish species in the upper Colorado River Basin.

   You are correct in saying that the Windy Gap Policy could affect developments in Wyoming. The money involved is $15 per acre-foot of depletion in an average water year. No water depletions are proposed in the RMP, so the Windy Gap Policy has not been discussed in this document. If water depletion projects are proposed in the future, we will notify potential water users of the need for BLM consultation and of the provisions of the Windy Gap policy.

72B

OSMRE REVIEW
OF THE
MEDICINE BOW - DIVIDE RMP/EIS

Comments/Suggestions:

1 Page 157, air quality standards. Please provide your source for the Cheyenne and Rawlins visibility information. Also, the total suspended particulate data for several cities provided in table 13 is outdated and should be revised with more recent Wyoming Air Quality Division information if possible.

2 Pages 159 and 160, tables 14 and 15. Please identify whether the companies listed in these tables are emitting controlled emissions or uncontrolled emissions. Since specific emission information is provided for only those companies involved in point source emissions (table 15), it would be helpful if the type(s) of emissions for the remaining, presumably non-point source emission, companies were included. Also, the source for the information in table 14 should be provided.

3 Page 209, fisheries, habitat and species. We believe the U.S. Fish and Wildlife Service (USFWS) "Windy Gap Policy" for the upper Colorado River Basin may apply to the potential depletion of water resulting from energy development activities in portions of the planning area. Under this policy, no operator may deplete water supply in reservoir by USFWS to continue Upper Colorado River Basin to be in compliance with section 7 of the Windy Gap Policy and the Endangered Species Act. We suggest that the affected fish species be identified and the Windy Gap Policy be discussed in this section of the document.

87A

[Handwritten letter has been typed for readability.]

John R. Swenson
P.O. Box 6154
Minneapolis, Minn. 55406

September 9, 1987

Dear Sirs:

1 Please accept my comments, as follows, concerning the Wilderness Supplement as well as the Medicine Bow/Divide environmental Impact Statement (EIS) and Draft Environmental Impact Statement. I am acquainted with this area of Wyoming and continue to agree that this Medicine Bow and Divide Resource Areas contain outstanding wilderness, wildlife-dependent, cultural and scenic resources of certain national significance. As these resources areas are unique, fragile and valued and fully beneficial now and all life in this endangered planet. I wish to advise that I oppose the preferred alternative as such when implemented will include significant portions of these resource areas.

Rather, I propose that the Medicine Bow and Divide Resource Areas be permanently managed as a National Natural Preserve so that these resource areas may be saved as a living, native park, and all life. With each unit of the Bureau of Land Management established as a permanent National Natural Preserve in the purpose of the Bureau of Land Management, U.S. Department of the Interior, is to preserve all of the wilderness, wildlife-dependent, cultural and scenic resources as located on the Bureau of Land Management areas.

With each park preserve to protect ecosystems, preserve watersheds, save and enhance all wildlife, fish and botanic habitats areas, protect and promote all individual resources and their natural diversity, preserve rivers and streams, streams, restore or recover all wild-dominated areas so that natural environmental condition and to preserve, protect, strengthen and expand wilderness. As wilderness is the foundation of all land and water resources. With the purpose of all land and water resources planning and management to preserve, protect, strengthen and expand wilderness.

I, then, fully hope that work of the following areas and areas if not presented lands and areas as located by Bureau of Land Management Environment areas in this Medicine Bow and Divide Resource Areas be designated as wilderness and included in our National Wilderness Preservation System, at this time; as each such area described separate wilderness attributes:

Encampment River Canyon	9,175
Savage Run Area	1,240
Sierra Mountains	7,100
Platte Mountains	9,480

87B

Adobe Town 88,765
Petrie Mountains 28, 772
Plus an additional 1,254,000 acres

1 So as to secure a total of some 1,400,000 acres of wilderness to be located on this Medicine Bow and Divide Resource Areas as administered by the Bureau of Land Management, and included in our National Wilderness Preservation System. To include rivers and streams - eligible in our National Wild and Scenic Rivers system. To classify these Resource Areas as a National Critical Habitat Area so to save all life including the Wild Bride, Peregrine Falcon, Black-footed Ferret, Wyoming Toad, Great Bear, Long-billed Curlew, Piping Plover and Mountain Lion.

To save all old-growth-old-growth habitat and to include some in a National Old-Growth Sanctuary System. And to ban all forms of surface subsurface activities developments on these Resource Areas so as to save these areas as preserve units. So as to establish these Resource Areas as permanent National Natural Wilderness Wildlife-Biological Preserves and to select the following as these Resource Areas permanent management plan. Alternative Preservation Wilderness Wildlife-Biological Scenic Resources. To ban all forms of developments on all proposed and potential wilderness. To acquire all inholdings on all Public Lands and with No Disposal of any Public Lands. For when we save our natural lands and waters; we save America!

Sincerely

/s/John R. Swanson

93A

Southern Rocky Mountain District
Exploration United States

Marathon Oil Company

PO Box 120
Casper, Wyo
Telephone

September 15, 1987

Mr. John Husband
BLM - Team Leader
P. O. Box 670
Rawlins, Wyoming 82301

Dear Sir:

Re: Comments on the Draft
Resource Management Plan

In general, the Draft RMP provides a full disclosure of management decisions for the public to review.

The comments that follow will address the areas of stipulations and split-estate jurisdiction.

1 We recommend the implementation of Alternative "C" as the preferred alternative because it more fully represents implementation of the mining and mineral law. The statement on Page 4 best summarizes this goal as "Leasing, exploration and development of oil and gas in MCR areas would be emphasized through placement of mineral restrictions on surface disturbing activities." This point should be carried further for all lands under all alternatives, not just MCR lands.

2 Preceding the use of stipulations, a map would be helpful in determining the aggregate for surface disturbance, Wildlife and Special Resource Protection stipulations.

3 We oppose the requirement for a plan amendment to waive the No Surface Occupancy stipulations. This stipulation and rationale for waiving it differ greatly from the "Growing Proposed Stipulations." It is unclear to question the ability of the Resource Areas to determine exceptions on a case-by-case basis of the validity of the stipulation. The use of a plan amendment will be a costly and timely process if and when this manner necessary. We strongly support the decision-making process in the Resource Area instead of deferring to the State Office and plan amendments, in most cases.

93B

Mr. John Husband
BLM - Team Leader
September 15, 1987
Page 2

4 Concerning split-estate lands, it is confusing to read the tables when numbers total either BLM jurisdiction and/or total land in the resource area. In all alternatives, except "C", 1.4 million acres of land will have seasonal stipulations and anywhere from 457,511 acres to 1.5 million acres will have Surface Disturbance Restrictions. The BLM has not clarified whether these are public lands or whether split-estate lands are also included. The BLM's authority on private lands is questionable for all but threatened and endangered species.

Thank you for the opportunity to comment on this plan.

Very truly yours,

Bradley G. Penn
Land/Environmental Coordinator

BGP/mg

cc: J. P. Conner
J. D. Pollini
J. D. Wilcox

(87-M-558)

Response to Letter 87

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

Responses to Letter 93

1. The BLM recognizes that mineral exploration and development can and should occur on the public lands while protection is provided for other resources and values. Under the proposed RMP, the entire planning area would be available for oil and gas leasing, while sensitive resources and values would be protected by the Wyoming BLM standard mitigation guidelines. This is consistent with national policy for availability of energy resources for development and the principle of multiple-use management of the public lands.

2. Ideally, a map such as you suggest could depict areas where lease restrictions would be applied. In fact, some of such areas are shown on maps in the draft RMP/EIS: historic trails, VRM classes, recreation sites, sage grouse leks, raptor concentration areas, and the Baggs elk crucial winter range. However, even if these areas were shown on an aggregate map, the map still would be incomplete because areas like steep slopes, riparian areas, and high priority habitats have not been mapped.

3. The proposed plan does not specify any particular geographic areas for a "no surface occupancy" (NSO) requirement. NSO could be used to protect specific resource values, as discussed in the Standard Mitigation Guidelines appendix to this proposed RMP/final EIS.

4. Please see general response 8.

95B

Mr. John Husband
August 24, 1987
Page 2

Thank you for the opportunity to review and comment on this plan. Please keep me informed of the progress in this effort.

With best regards, I am

Very truly yours,

Mike Sullivan

MSirron

95A

STATE OF WYOMING
OFFICE OF THE GOVERNOR
CHEYENNE 82002

MIKE SULLIVAN
GOVERNOR

August 24, 1987

Mr. John Husband, Team Leader
Bureau of Land Management
Rawlins District
P.O. Box 670
Rawlins, WY 82201

Dear Mr. Husband:

The Draft Resource Management Plan/Environmental Impact Statement/Wilderness Supplement for the Medicine Bow - Divide Resource Area has been circulated for state agency review and comment. Copies of agency comments are enclosed for your consideration and use.

Please note that these comments include several observations that should be carefully considered in developing the final document. Agencies have also identified needs for further information and detail on proposed management direction which should be provided in the final plan.

The preferred management alternative generally provides for a reasonable balance between resource use and protection. As is normally the case, the preferred alternative may benefit from additional refinement in response to agency, industry and general public input. I intend to use my opportunity for consistency review to see how responsive the final plan is to such input.

Please continue to coordinate with pertinent agencies on the individual activity plans that will be developed subsequent to this RMP. I also feel that the final plan should contain sufficient flexibility to adjust management prescriptions and activity restrictions in response to emerging technology and changing circumstances.

With regard to the Wilderness Supplement, the rationale for delisting two of the three WSA's as not suitable for wilderness designation appears to be appropriate. I intend to review the Desolation Mountain Study area wilderness suitability recommendation in the broader context of other Wyoming BLM wilderness evaluations and will formulate a response when the BLM recommendations are completed statewide.

Response to Letter 95

1. Thank you for facilitating review and comment by agencies of the state of Wyoming. Our responses to state agency comments follow each agency's letter. Also please see general response 1 regarding comments pertaining to wilderness.

96

MIKE SULLIVAN
GOVERNOR

Wyoming State Archives,
Museums & Historical Department

BARRETT STATE OFFICE BUILDING • CHEYENNE, WY 82002 • [illegible]

July 30, 1987

Mr. Richard H. Miller
State Planning Coordinator
Herschler Building
Cheyenne, Wyoming 82002

RE: BLM Medicine Bow-Divide Resource Area Management Plan--DEIS
SPC #86-240

Dear Mr. Miller:

1 Richard Bryant of our staff has received information concerning the aforementioned plan. Thank you for giving us the opportunity to comment.

Management of cultural resources on BLM lands is conducted in accordance with a memorandum of understanding between the BLM and the SHPO. The MOU calls for survey, evaluation and protection of significant historic and archeological sites prior to any disturbance. Provided the BLM follows the procedures established by the MOU, we have no objections to the management plan. Specific comments on the individual project's effect on cultural resource sites will be provided to the BLM when we review the individual cultural resource reports.

If you have any questions please contact Mr. Bryant at 777-6292.

Sincerely,

Thomas C. Marceau

Thomas C. Marceau
Acting State Historic
Preservation Officer

TCM:RL:B:klm

Response to Letter 96

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

97A

THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

GORDON W. FAIRBT
STATE ENGINEER

State Engineer's Office

HERSCHLER BUILDING August 27, 1987 CHEYENNE, WYOMING 82002

Richard H. Miller
State Planning Coordinator's Office
Herschler Building
Cheyenne, Wyoming 82002

Re: Medicine Bow - Divide Resource
Management Plan/Draft EIS/
Wilderness Supplement State
Identifier Number 86-240

Dear Mr. Miller:

We found little to comment upon in our review of this RMP.

1 In the Chapter on Affected Environment, Surface Water, Item, page 137, we would suggest the 1st sentence could better read: "Surface water use on the public lands in the planning area is mainly livestock watering and wildlife watering." - Otherwise the sentence is misleading because these are not the main water uses except on the public lands.

2 The remainder of the 1st paragraph is extremely brief with much detail left out. For example, hydropower is generated at Seminoe Dam, Fremont Canyon, Alcova Dam and Glendo Dam. In addition to Kortes Dam which is mentioned also, there are numerous irrigation reservoirs not mentioned which impact the public lands, such as Lake Hattie on the Sarasota River Basin and many reservoirs used for fishing, recreation, and wildlife habitat, in addition to other uses.

There is little mention of irrigation uses of water, and no mention of the fact that the resulting hay base produced from irrigation together with grazing on the public lands, provide basic natural resources for agricultural industry in the planning area.

3 This office and the BLM have long-standing cooperative agreements under which water rights information and cooperation on applicable permit proceedings are conducted. We presume that the BLM will continue to apply for the applicable water rights permits, as required by State law, before constructing diversions, detention structures, stock ponds, reservoirs, and other types of permits.

Before using water for temporary industrial purposes, such as road, oil and gas well, and other construction, and for fire, road practices such as fire control or planned burn fire management projects, a permit from the State Engineer must be applied for and approved. This is true for public agencies as well as for temporary uses proposed by private interests. A significant portion of the planning area is in the area upstream of the North Platte Reservoir system where senior priority

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Richard H. Miller
Page 2
August 27, 1987

water rights are the provision of the U.S. Supreme Court Decree on the North Platte River system restrict the availability of surplus water available for new priority temporary use permits. Often there will be no water available for such use at all in a given water year from the main stem North Platte River or from the North Platte tributaries above Pathfinder Dam. In such circumstances, and on other streams and rivers during the irrigation season, or during the off-season and spring reservoir refilling periods, water may not be available to a present priority temporary use permit because of calls for regulation to satisfy the senior priority water rights. During such time periods, it may be necessary to obtain water for the temporary use from existing valid appropriations, which are in priority, by water agreements filed with and approved by the State Engineer.

4 In our review of the Wilderness Supplement, we found that the proposed Management Area Closure MA4 would affect an active ditch and possibly affect the associated water rights. We suggest the MA4 boundary be moved upstream of the headgate of the affected ditch far enough to allow normal maintenance by the ditch owner(s) without having to notify BLM. The water rights and ditch are:

Permit No. 4247, Pathfork Ditch, A.J. Andrews, priority date, Certificate Record 2P, page 221, priority date April 1907, for irrigation of 19 acres, 0.5 cfs from Muddy Creek, tributary South Fork Canadian River, diverting in the NE¼NE¼ Section 24, T.16N., R.84W.

Thank you for the opportunity to comment on this resource management plan.

Very truly yours,

Frank J. Trelease

FRANK J. TRELEASE
Assistant State Engineer

FJT:llw
Enclosure - Referral Memo
cc: Gordon W. Fairbt
State Engineer

Responses to Letter 97

1. Thank you for clarifying this. As you suggest, the intent of the sentence you refer to was to describe the main surface water uses on *public* lands in the planning area.

2. Please see general response 3.

3. The BLM will continue to observe state laws for management of public lands when seeking to acquire water rights.

4. Please see general response 1.

98B

THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Administration (307) 777-7937 | Air Quality Division (307) 777-7391 | Land Quality Division (307) 777-7756 | Solid Waste Management Program (307) 777-7752 | Water Quality Division (307) 777-7781

MEMORANDUM

TO: John Husband, Team Leader
Bureau of Land Management

FROM: Randolph Wood, Director
Department of Environmental Quality

DATE: August 5, 1987

SUBJECT: Review and Comments on the Medicine Bow Divide Resource Area RMP/DEIS

D.J. Fanning reviewed the above referenced document and provided the following comments:

Pages 61-62, Comparison of Alternatives: Soils, Water and Air Management

The objectives of the Soils, Water and Air Management Program as described in the Preferred Alternative are commensurate with the Water Quality Management planning activities in the Water Quality Division of DEQ. These objectives are well supported by statements in Chapter 1, the Affected Environment and Chapter 4, Environmental Consequences, which includes average estimates of surface disturbance common to all alternatives, and those unique to each management alternative.

The general management practices described in the Appendices to the report for minerals, oil and gas, silviculture, and livestock grazing afford this agency a very comprehensive source for implementation of water quality best management practices.

Pages 148-149, Affected Environment, Water Resources, Quality

4 Clarification should be made between the DEQ Chapter I Quality Standards for Wyoming Surface Waters and the Quality Standards for Wyoming Groundwaters presented in Table 8, which is taken from Chapter VIII of the Wyoming Water Quality Rules and Regulations. Additional standards such as turbidity, D.O., and floating and settleable solids are applicable to surface waters.

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98A

THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Administration (307) 777-7937 | Air Quality Division (307) 777-7391 | Land Quality Division (307) 777-7756 | Solid Waste Management Program (307) 777-7752 | Water Quality Division (307) 777-7781

MEMORANDUM

TO: John Husband, Team Leader

FROM: Randolph Wood, Director, Department of Environmental Quality

THROUGH: Charles A. Collins, Administrator, Air Quality Division
Michael Stoll, Air Quality Engineer

SUBJECT: Comments on the Draft Resource Management Plan/Environmental Impact Statement, for the Medicine Bow and Divide Resource Areas

DATE: July 24, 1987

The Air Quality Division of the Department of Environmental Quality has had the opportunity to review the above referenced document and offers the following comments:

1 Page 154 - The author stated that there are no Class I air quality areas in the planning area. This is incorrect. The Savage Run Wilderness Area located in the Medicine Bow National Forest was designated as a Class I area when the Prevention of Significant Deterioration (PSD) regulations were adopted by the State of Wyoming.

2 Page 155 & 156 - Table 11, Wyoming and National Ambient Air Quality Standards, contains several errors which should be corrected. The fluoride ambient standard measured as hydrogen fluoride has been revised as follows:

Averaging Time	Maximum Allowable Concentration for Averaging Time
12 hours	3.0 ug/m3
24 hours	1.6 ug/m3
7 days	0.5 ug/m3
30 days	0.4 ug/m3

The 1-hour maximum concentration for photochemical oxidants should reference footnote i. Finally, the 3-hour ambient standard for nonmethane volatile organic compounds has been repealed by the State of Wyoming.

3 Page 158 thru 162 - Map 41 and Tables 14 and 15 appear to be quite dated. Several of the companies listed are no longer in business or are operating in a fashion different from the representations in the tables.

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98C

John Husband
August 5, 1987
Page 2

Page 167, Areas Needing Special Management, Paragraph 2

Analysis of the USGS data from Station #09254950, the Little Snake River below Baggs, for the time period of October, 1980 through September, 1985 indicates a maximum total dissolved solids value of 420 mg/l, which does not exceed the existing water criterion of 500 mg/l. The 420 mg/l concentration occurred at the low flow of 2.1 CFS on August 29, 1985 indicating the inverse relationship of concentration and flow.

Four Mile Creek subbasins are major salinity contributors (water may exceed 2,000 mg/l TDS) and six subbasins are minor salinity contributors (water may exceed 1200 mg/l TDS) to Muddy Creek proper. Little salinity data is available for Muddy Creek, although the recorded maximum concentration of 1,299 mg/l was obtained on November 19, 1979 at a flow of 0.8 CFS. Although the data from the Little Snake River station below Baggs do not seem to indicate a salinity impairment of water use, sediment loading to the river remains as the primary use impairment, and the data for this station indicate a weakly positive correlation between sediment and salinity ($r = 0.1934$).

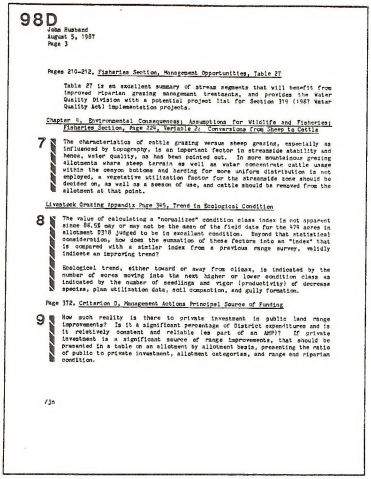
5 Sediment reduction techniques therefore provide some salinity reduction, especially when localized on stream segments which are high priority salinity contributors. However, since a major source of salinity is from the emergence of saline springs and from uncapped oil and gas wells, it appears that the most effective salinity control measures are to plug or divert the saline springs, cap cap the old wells, where the water can be developed for livestock and wildlife watering purposes.

Salinity control measures of this nature would produce greater on-site benefits, and reduce the total salt load transported by Muddy Creek and the Little Snake River.

Page 179, Vegetation Section; Riparian Vegetation Condition

6 Table 20 appears to have been derived by using the seed condition classification used on sagebrush range sites, i.e. that the site condition is derived by comparison of the current plant community as a percentage of the potential or climax plant community. Platts, et al., 1987, have stated that "... the concept of climax, as applied to forest and rangeland habitat classifications, is generally not applicable to riparian classifications". Methods for Evaluating Riparian Habitats With Applications to Management, 1984 - FS General Technical Report INT-221. Intermountain Research Station, Ogden.

This interpretation apparently relies on the more frequent disturbances due to periodic runoff events, and the accompanying sediment deposition or transport, which may alter consistent progression towards a long term, stable climax. These researchers use the plant community type, rather than the range site as the unit of classification.



98D
Jean Rasmussen
August 5, 1987
Page 3

Pages 210-212, Fisheries Section, Management Opportunities, Table 27

Table 27 is an excellent summary of stream segments that will benefit from improved riparian grazing management treatments, and provides the Water Quality Division with a potential project list for Section 319 (1987 Water Quality Act) implementation projects.

Chapter 4, Environmental Consequences, Assumptions for Wildlife and Fisheries; Fisheries Section, Page 274, Variable 7: Conversions from Sheep to Cattle

7 The characteristics of cattle grazing versus sheep grazing, especially as influenced by topography, is an important factor in streamside stability and hence, water quality, as has been pointed out. In more mountainous grazing allotments where steep terrain as well as water concentrate cattle usage within the canyon bottoms and bottlenecks, a more uniform distribution is not employed, a relative utilization factor for the streamside zone should be decided on, as well as a season of use, and cattle should be removed from the allotment at that point.

Livestock Grazing Appendix Page 345, Trend in Ecological Condition

8 The value of calculating a "normalized" condition class index is not apparent since 86.62 may or may not be the mean of the field data for the 474 acres in allotment 8318 judged to be in excellent condition. Beyond that statistical consideration, how does the summation of these factors into an "index" that is compared with a similar index from a previous range survey, validly indicate an improving trend?

Ecological trend, either toward or away from climax, is indicated by the number of acres moving into the next higher or lower condition class as indicated by the number of seedlings and vigor (productivity) of decrease species, plus utilization data, soil compaction, and gully formation.

Page 372, Criterion 3, Management Actions Principal Source of Funding

9 How much reality is there to private investment in public land range improvements? Is it a significant percentage of District expenditures and is it relatively constant and reliable (as part of an APP)? If private investment is a significant source of range improvements, that should be presented in a table on an allotment by allotment basis, presenting the ratio of public to private investment, allotment categories, and range and riparian condition.

/jn

Responses to Letter 98

1. Thank you for calling this error to our attention. This correction has been made in chapter 3 of this document.

2. The table you refer to has been revised for this final document. It appears as table 9 in chapter 3.

3. Please see the response to comment 1 of letter 72.

4. Thank you for bringing this information to our attention. An addition to the section on water quality appears in chapter 3 of this final document.

5. Management actions such as those you suggest could be effective in reducing salt load in Muddy Creek and the Little Snake River and will be carried out as opportunities are identified in those watersheds.

6. Condition classes were the measure used when the inventory was conducted. In 1982, the BLM adopted as its principal rangeland inventory method the range site inventory procedure described in the SCS National Range Handbook (USDA, SCS 1976). Supplemental guidance and procedures were developed and included in BLM Handbook H-4410-1, Table 20 in the draft RMP/EIS presents condition class ratings as calculated with the use of the handbook procedures for all wetland, subirrigated, and saline subirrigated sites within the inventory area. The objective of improving condition class demonstrates the intent of resource management activities related to riparian areas. As specific policies, procedures, and available research methods change, monitoring and evaluation will be changed accordingly; however, the intent will remain the same: to evaluate, classify, and improve or maintain riparian areas as needed.

7. The specifics of grazing treatments, such as proper utilization in streamside zones and season of use, will be determined during activity planning. The needs of riparian areas will be carefully considered.

8. Both inventories used in the comparison were based on plant composition within the community, and the condition indices were determined according to percentage of composition by weight. Both methods employed a weight estimate inventory procedure, whether entirely ocular or supported by adjustments of estimates made with the use of measured plots. It is true that the midpoint of the condition class may or may not be the mean of the field data or of the population. We are not trying to lead anyone to believe that we know even a sample mean to be in the neighborhood of the midpoint of the condition class by using the statistical term "normalized." Perhaps it would be more accurate to use the term "weighted condition class estimate" to present as an apparent trend.

   Any time a comparison is made between two condition class ratings, an estimate of "apparent" trend is made. Any short-term perturbances in the observed community caused by climate, previous grazing intensity and especially variability in the collection of field data between observers may play a role in masking the "true" condition and subsequent trend.

   The use of seedling establishment, plant vigor, plant utilization, soil compaction, and presence of rills and gully formation are all appropriate in the determination of apparent trend. These were all used in the determination of apparent trend for those allotments that were not surveyed with the ecological site inventory in 1986. However, change in composition by weight over time also is an appropriate method for determining an "apparent" trend. This is the method that was used because it is the method for which we had the most recent information.

9. The principal sources of funding listed for each allotment category are not listed in order by amount of investment. Contributions toward range improvement projects provided by private investments typically have been in the form of materials, project maintenance on existing projects, and labor on construction of new projects. The amount of private investment is highly variable from allotment to allotment.

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THE STATE OF WYOMING

Wyoming State Forestry Division

3100 WEST 22ND STREET CHEYENNE WYOMING 82002

August 13, 1987

Mr. John Mussard, BLM Team Leader
Bureau of Land Management
P.O. Box 670
Pinedale, WY 82941

RE: Wedding Bay/Dixie Resource Management
Plan/Draft EIS/Wilderness Supplement

Dear Mr. Mussard:

1 This refers to your proposed action to manage Prospect Mountain (WY-030-003) as a "Wilderness Area".

We are concerned about some of the impacts that have been expressed. We have greater impact than only to the area. Type recovery is that if left uncleared, the Mountain Pine Beetle epidemic that is anticipated to occur in the Lodgepole Pine and other pine species will make the area to become a source of infestation to the surrounding forested areas. After the insects have destroyed the living pine trees, then these trees will eventually fall over providing very heavy ground fuel. In the event of an ignition very serious resource losses will occur during the fire; and more serious damage will occur to the bare soil when runoff from snow melt or heavy rains occur. We also feel that should a fire occur, as past history indicates, the area would incur serious damage for support of the wildlife.

We would suggest that this consideration be made in any planning recommendation for the area.

Thank you for the opportunity to comment.

Very truly yours,

Carl E. Johnson
State Forester

CEJ/eb

100A

DIRECTOR AND STATE GEOLOGIST
CARL B. KLAUS

Serving Wyoming Since 1933

THE GEOLOGICAL SURVEY OF WYOMING

UNIVERSITY STATION
P.O. BOX 3008
LARAMIE, WYOMING 82071

307 742 2054 307 721 2000 307 766 2286

MEMORANDUM

To: State Planning Coordinator
From: Gary B. Glass, State Geologist
Subject: Medicine Bow/Dixie Resource Management
Plan/Draft EIS/Wilderness Supplement
(State Identifier 86-240)
Date: August 14, 1987

We have reviewed these documents and submit the following comments.

General - We feel that it is one of the Bureau of Land Management's (BLM's) best efforts in providing the discussion of geology and mineral resources. We do, however, have some specific comments that should augment their discussions. These are listed below.

Resource Management Plan

1 Page 21, Mineral Management - There is no discussion here on leasable minerals. The BLM should be required to address the management of a possible coal/uranium mining district within the management area. We refer them to our later discussions related to this possibility (Pages 126-127).

2 Page 104, Sand Creek National Historical Landmark - BLM needs to indicate that the rock units of interest are part of the Permian/Pennsylvanian Tensleep formations.

Page 102, Geophysics - The Diagtrack is actually upper Miocene aged Ogallala Formation planated by post-Miocene erosion.

3 Page 102, Table 5 - The Whelk wildlife Refuge withdrawal area lies within an area that has many kimberlite intrusives. There is a potential that these kimberlites could contain diamond.

4 Pages 126-127 - In regard to leasable mineral occurrences, the report needs to mention that a "Shell" mineral deposit could be found in portions of the management area because of similarities in geology with other world-class mineral deposits around the world.

. . . .

Response to Letter 99

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

100B

State Planning Coordinator

August 14, 1987
Page 2

5 In particular, the Sweetwater and Saleratus Lake districts and diamond potential need to be addressed in much greater detail. There is no discussion of gold and iron formation on Granite Peak or the significant geologic setting of the Sweetwater Uranium Precambrian belt. This report should also address gold and iron formation occurrences in the Seller Mountains and Precambrian rocks of the Ferris Range.

The Seller Mountains in the Saleratus Range have received considerable interest in the gold, silver, copper, molybdenum, and uranium potential associated with the Precambrian rocks there. The Seller Mountains are considered a favorable gold-bearing district due to its 30 million tons of rock averaging 0.027 ounces of gold per ton (Hausel, 1986). The full areal and vertical extent of this mineralization is currently unknown.

In an open pit mine of similar tonnage and grade, the number of diamond-bearing kimberlites are of industrial quality ribbon, and diamond sizes should be included to better discuss diamond potentials. The report should also include data on heavy mineral anomalies.

In the Precambrian complex, this report mentions the potential for diamonds, but it doesn't mention the more important potential commodities - nickel, platinum, titanium, and vanadium. Nor does it discuss the metals found at the Stinker mine along the southern edge of the anorthosite complex (tungsten, copper, gold, silver, and molybdenum). Significant copper, platinum, gold, and ultramafic-carbonite occurrences also occur within the map area on page 126, although these are mostly within the Medicine Bow National Forest.

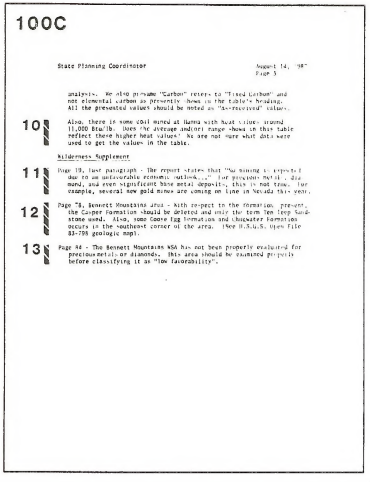
6 Page 155, Soil, water, and air resources - For lack of a better place to make certain comment, we want to point out that there are identified active faults in the study area (Red Desert and west of Rawlins). A few of these appears to be potential. There are also some movements in portions of the study area (Wamsutter Arch and Rock Springs Uplift) which are not active.

7 Page 177, Cretaceous plants - Cretaceous plants usually occur west and south of Rawlins.

8 Page 178, Leasable Minerals - The second paragraph says that leasing for all leasable minerals is open. This is not true in portions of coal and oil shale areas that are closed to leasing.

Appendices

9 Page 203 - Table Coal 1 - This table has some technical inaccuracies. Portions of the Red Desert coal area are not part of a producible



100C

State Planning Coordinator August 14, 198[illegible]
Page 3

analysis. We also put name "Carbon" refers to "Fixed Carbon" and not elemental carbon as presently shown in the table's heading. All the presented values should be noted as "as-received" values.

10 Also, there is some coal mined at Hanna with heat values around 11,000 Btu/lb. Does the average analysis range shown in this table reflect these higher heat values? We are not sure what data were used to get the values in the table.

Wilderness Supplement

11 Page 19, last paragraph - The report states that "No mining is expected due to an unfavorable economic outlook..." For previous metal-, dia-mond, and even significant base metal deposits, this is not true. For example, several new gold mines are coming on line in Nevada this year.

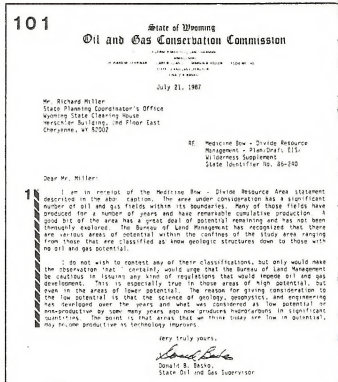
12 Page 31, Bennett Mountains area - With respect to the formation, present, the Casper Formation should be deleted and only the term Ten Sleep Sand-stone used. Also, some Goose Egg formation and Chugwater formation occurs in the southwest corner of the area. (See U.S.G.S. Open File 82-706 geologic map).

13 Page 46 - The Bennett Mountains ACEC has not been properly evaluated for precious-metals or diamonds. This area should be examined properly before classifying it as "low favorability".

Responses to Letter 100

1. The section to which you refer is a part of our planning criteria. Planning criteria are not management prescriptions or actions; rather, they serve to focus our planning effort on the issues. The plan is not limited to addressing only the topics specifically covered in the criteria. Locatable minerals were addressed in each alternative.
2. Please see general response 3, paragraphs 1 and 4.
3. Please see general response 3.
4. Please see general response 3.
5. We are aware of the recent evaluation activities in the Seminoe district by two mining companies. They have both ceased operations in the area since conducting their evaluations. The Silver Crown district includes very little public land. A records search has indicated that there are no claims filed on BLM-managed public land in this area.

   The anorthosite complex may have potential for sodium flux, titanium, and vanadium, but a records search indicates that the only claims on public lands active since 1981 are for alumina. Also please see general response 3.
6. As is indicated in the draft RMP/EIS on page 137, we are aware that soil stability problems occur in areas other than those specifically discussed, but to a lesser extent. The map of areas where unstable slopes occur on public lands shows only the larger areas where problems are known to exist. Also please see general response 3.
7. Thank you for the information. Since the draft RMP/EIS was released, we have also become aware of another poisonous plant, two-grooved milkvetch, which could endanger cattle and sheep year round. We will continue to update our information regarding poisonous plants.
8. Our statement is based on the fact that there has been a decrease in the number of claims staked and the number of notices and plans of operations filed with BLM. Thus, we have inferred that present interest in locatable minerals is lower than in previous years.
9. The Coal appendix has been rewritten for this final document.
10. The coal quality data shown in table Coal-AP-1 for Hanna Basin represent the range of mean values for Hanna and Ferris Formation coals. These are the two formations containing the most significant coalbeds in this area. Values for individual beds could fall outside these ranges.
11. Wilderness comments will be responded to in the forthcoming wilderness document, as detailed in general response 1.
12. Please see the response to comment 11 of this letter and general response 1.
13. Please see the response to comment 11 of this letter and general response 1.



101

State of Wyoming
Oil and Gas Conservation Commission

July 21, 1987

Mr. Richard Miller
State Planning Coordinator's Office
Wyoming State Clearing House
Herschler Building, 2nd Floor East
Cheyenne, WY 82002

RE: Medicine Bow - Divide Resource Management - Plan/Draft EIS/ Wilderness Supplement
State Identifier No. 86-240

Dear Mr. Miller:

1 I am in receipt of the Medicine Bow - Divide Resource Area Statement described in the above captions. The area under consideration has a significant number of oil and gas fields within its boundaries. Many of those fields have produced for a number of years and have remarkable cumulative production. A good bit of the area has a great deal of potential remaining and has not been thoroughly explored. The Bureau of Land Management has recognized that there are various areas of potential within the confines of the study area ranging from those that are classified as know geologic structures down to those with no oil and gas potential.

I do not wish to contest any of their classifications, but only would make the observation that I certainly would urge that the Bureau of Land Management be cautious in issuing any kind of regulations that would impede oil and gas development. This is especially true in those areas of high potential, but even in the areas of lower potential. The reason for giving consideration to the low potential is that the science of geology, geophysics, and engineering has developed over the years and what was considered as low potential or non-productive by some many years ago now produces hydrocarbons in significant quantities. The point is that areas that we think today are low in potential, may become productive as technology improves.

Very truly yours,

Donald B. Basko
State Oil and Gas Supervisor

DBB:dl

[illegible] WEST FIRST STREET • P.O. BOX 2640 CASPER, WYOMING 82602 (307) 234-7147

Response to Letter 101

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

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Mr. Rick Miller, SPC
Page 2
August 14, 1987

We strongly support the proposed management of the Shirley Mountain Cavet. The provision of this type of opportunity will greatly expand the types of opportunities available to both residents and non-resident recreationists.

2 We also support the provision of opportunities for off-road vehicle (ORV) use, a segment of the recreating public which is often overlooked. However, we do have some concerns with the proposed management of these sites. Simply opening the area to ORV use does not resolve the problem. It merely creates new ones. Careful consideration must be given to the area management and the coordination and planning of potential ORV use. Since no clear mitigation efforts are outlined in the plan, the coordination and planning is a critical element.

There is strong evidence in a variety of literature to suggest that the ORV use will create ecological damage. But there is no discussion of this possibility in the plan. If damage does occur, what effects will it have on adjacent lands and adjacent landowners? Will the BLM be able to mitigate these damages given current budget concerns? What will the long-range effects be to the local ecosystem? Is this the optimum area to allow this type of activity?

Rather than jump into such a program, it would seem to be to the benefit of all concerned parties to carefully outline a total program of management, users, resources, and adjacent landowners. Such an effort would be proactive and, hopefully, prevent future problems from occurring, instead of a reactive or band-aid approach to the management of a difficult situation.

3 The Wyoming Recreation Commission would also like to have some attention paid to the growing demand for snowmobile trail opportunities in this region of the state. We are currently working with the U.S. Forest Service to expand the snowmobile trail system in the Snowy Range. Although the nearest acres of BLM land adjacent to this forest will, future planning should involve the BLM as well. Although we are only now bringing this to your attention, it may merit some discussion in the final planning document.

4 The agency supports the preferred alternative for historic trail resources. The mitigation procedure provided should be adequate management actions and seem to be directed towards protection and preservation of the historic resources. A philosophy which is consistent with that of this agency. The only comment we might offer in this area would be a reminder that the Wyoming Recreation Commission is to be consulted when negotiating with private landowners regarding cultural resources along historic trails, as dictated in the agreement between the Department of Interior and the state of Wyoming.

5 For the Como Bluff area, we would prefer that the BLM choose Alternative B. The objective for which is "to manage the resources...in a manner that preserves historically significant sites." The preferred alternative on the other hand would allow for management of the area for mineral development. This is a site with potential for greater levels of tourism development, and the management of

102A

THE STATE OF WYOMING
MIKE SULLIVAN
GOVERNOR

AUG 17 1987 1890-1990 WYOMING CENTENNIAL A LASTING LEGACY

WYOMING RECREATION COMMISSION
122 WEST 25TH, HERSCHLER BLDG. (parcel wyoming 82002)

P.O. Box 10240
Cheyenne
[illegible]

August 14, 1987

Mr. Rick Miller
State Planning Coordinator
Wyoming State Clearinghouse
Herschler Building
Cheyenne, Wyoming 82002

Dear Mr. Miller:

The Wyoming Recreation Commission has received the Bureau of Land Management's Draft Environmental Impact Statement for the Medicine Bow-Divide Resource Management Plan. Thank you for the opportunity to provide input into this review process.

The Resource Management Plan demonstrates the Bureau of Land Management's concern for the provision of recreation services and opportunities within the Medicine Bow-Divide Resource Area. We applaud the proposed development of additional campgrounds at Shirley Mountains, Battle Mountain, and Jelm Mountain, as well as the boat launch and picnic area at Prospect Creek. However, these developments will not resolve the deficit of camping opportunities identified in the 1985 State Comprehensive Outdoor Recreation Plan (SCORP). Data provided in Table 40, pages 3-28 thru 3-30 of the SCORP shows a need for 3,777 campsites in Albany, Carbon, Laramie and Sweetwater counties. The proposed developments of these new sites will help to meet this need but will do little to fully address it. Specifically in Laramie County, which shows a need for 1,826 campsites and has no BLM sites proposed near its borders.

1 We would suggest that consideration be given to providing even more recreation opportunities in the Resource Area and that consideration of the development of the Nine Mile Creek and Big Creek sites for recreation may be appropriate in the near future.

Additionally, emphasis must be placed on the management of recreation resources along the North Platte River. This stretch of river provides a variety of recreation opportunities unavailable in other areas in southeastern Wyoming. The proper management of facilities and the provision of access will provide tremendous benefits to recreationists and the local economy as more and more people become aware of the quality range of experiences available in the region.

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5 the site for mineral development could restrict its ability to attract more visitors to the area.

The comments provided are intended to show the perspective of the Wyoming Recreation Commission in regards to the planned management of the Medicine Bow-Divide Resource Area. If you have any questions regarding this review, please feel free to contact this office.

Sincerely,

R.D. "Mac" Mayfield, Director

By Clifford E. Hiskett
County Director

CEH/JK:lb

bcc: RDM/CEH/RF, JS/YSSF, PF

Responses to Letter 102

1. We agree that the proposed recreation developments will not totally satisfy the need for campsites in southeast Wyoming. We have assigned priority to developments that we believe are most needed by the public. The priorities are reflected in the proposed RMP. Very little public land lies within or adjacent to Laramie County, and there are no known outstanding recreation attractions on those parcels of public land that would warrant consideration for some type of recreation development.

   The Big Creek undeveloped site may lend itself to future recreation developments, but at this time there is no public access to the site except by boat from the North Platte River. Boaters generally need few facilities other than access to the river and a boat launch area. The Big Creek site has been identified in the proposed plan as an area to which public access should be obtained. Until access is granted to the area, there is no need to propose developments there. If we should obtain access, we would certainly consider developing the site.

   The Nine Mile Hill site is attractive in part because of its undeveloped nature, and we believe it should remain undeveloped for now. Please keep in mind that nothing in the proposed RMP precludes us from developing more recreation facilities if opportunities present themselves.

2. In almost all of the planning area, the ORV designation would be "limited to existing roads and trails." We are not anticipating a significant increase in ORV use. Considering this, we think there would be minimal damage to other resources and minimal overall effects on owners of adjacent property throughout the planning area. If unforeseen damage should occur, we have the mechanisms with which to react accordingly. For some areas (for example, the West Seminoe area, the Dune Ponds, and the Encampment River Canyon), potential or actual resource damage from ORV use is addressed in the proposed RMP, and appropriate designations are established. In these areas, as you note, proper planning and coordination with all interested parties is essential.

3. We would be happy to discuss extending snowmobile trails onto BLM-administered public land adjacent to the national forests. Please include us in any future discussions of this topic.

4. The BLM will continue to consult with the Wyoming Recreation Commission when negotiating with private landowners regarding cultural resources along historic trails.

5. Mineral resources could be developed in the Como Bluff area while objectives for historic, paleontological, and natural history values could still be met. The protection requirements in the proposed RMP (intensive management of surface disturbance near exposures of the Morrison Formation; requirements for plans of operations) for the area would be sufficient to accomplish this, and the ACEC designation would help to ensure sustained management attention to activities in the area.

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THE STATE OF WYOMING

AUG 17 1987

MIKE SULLIVAN
GOVERNOR

Game and Fish Department

BILL MORRIS
DIRECTOR

August 17, 1987

EIS 2869
Rawlins District Office
Medicine Bow-Divide Resource
Management Plan/Draft EIS
Wilderness Supplement
Albany, Carbon, Laramie, and
Sweetwater Counties.

Mr. Richard Beetin
District Manager
USDI/BLM
Rawlins District Office
1300 Third Street
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Beetin:

The Medicine Bow/Divide Resource Management Plan is being prepared to provide a comprehensive framework for managing lands and resources in Albany, Carbon, and Laramie Counties, Wyoming. The wildlife resources within this analysis area are varied and extensive. They are very valuable to local communities, the State of Wyoming, and the Nation. The wildlife resource has been a major contributing factor to the State's economy. Hunters spent over 19 million dollars in 1985 while hunting bighorn sheep, deer, elk, and antelope within the designated Resource Areas. The average economic value of these big game populations from 1981-1985 was $13,151,267.00 (Appendix I). These big game populations are dependent on BLM land to varying degrees (15 - 100%). In addition, BLM land provides a significant proportion of important and crucial habitat for many of these herds (see attached map, Appendix II). When trapping, fishing, and other forms of hunting, along with non-consumptive wildlife uses are included, this resource becomes very important to the people of Wyoming. For instance, small and upland game hunting in these resource areas contributes an additional $1,442,771 annually to be state's economy.

As planning documents, it is our opinion the RMP and DEIS are inadequate. In the BLM's Strategic Plan for Wildlife and Fisheries, 5 levels of planning are presented. These can be represented by a series of questions including:

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1. Where do we want to be?
2. How do we get there?
3. How do we schedule and fund?
4. Implementation
5. Did we arrive? Have we done what we set out to do?
6. Plan review and modification.

1 The first question establishes the goals to attain. The Resource Management Plan never addresses these fundamental questions, and as a result, we contend the plan is nebulous and ineffective. Goals are stated in general terms. Consequently, there is no way to measure progress toward the goals of a specific program.

We recommend the BLM's Strategic Plan for Wildlife and Fisheries be incorporated into the RMP and DEIS for the Medicine Bow/Divide Resource Areas. These documents should reflect priorities established by the agency at the national level for wildlife and fisheries resources. The Strategic Plan is a strong statement of intent by the BLM. Integrated resource management is required to achieve these wildlife objectives as well as other resource objectives. Historically, the BLM has been oriented towards commodity outputs (i.e. coal, oil, gas, minerals, grazing, timber) and has given little emphasis to fisheries, wildlife, or recreation. The Medicine Bow/Divide RMP and DEIS perpetuate this management philosophy. The Saratoga District of the BLM is encouraged to adopt the agency's own Strategic Plan for Wildlife and Fisheries to address this imbalance. Programs which emphasize commodity outputs consistently have a higher priority, and resource conflicts are generally resolved in favor of these programs at the expense of wildlife, fisheries, and recreation. We had hoped this planning process would correct this imbalance and place wildlife on an equal footing with these other commodity oriented programs.

This document does not adequately address or protect the many wildlife values in the resource areas. Wildlife should be more equal with livestock, oil and gas, and minerals.

Elk have been singled out as a priority species while many species of equal or greater importance have been almost totally disregarded. In some cases, even elk (i.e. the Baggs Elk Herd) have been sacrificed for mineral development.

2 Definitive plans must be made concerning when and where habitat monitoring, protection and improvements will take place. For instance, range

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2 monitoring is said to be needed before any additional allotment evaluations can be made. However, initiation and completion dates are not given. Plans for mineral, oil and gas development, livestock grazing, and timber harvests appear to have been made with little consideration for the wildlife they will displace or the habitat these programs will affect. In proposed each program (i.e. grazing, timber, mineral developments) was developed independently; then an attempt was made to mold them together into a unified, coordinated program for resource development. It is our impression the "LM presumes it can maximize or enhance wildlife while pursuing a plan to enhance resource development that will displace wildlife and/or adversely affect wildlife habitat on both the short and long term. The DEIS does not adequately recognize resources conflicts in the proposed plan, and development of one resource will often be at the expense of another. This plan is not integrated resource management. Cumulative impacts of proposed resource developments on wildlife and wildlife habitat are not assessed, nor can they be monitored meaningfully in the proposed plan. In fact, the RMP and DEIS do not include a monitoring program to evaluate conditions and assessments previous counts to evaluation of resource conflicts.

The thrust of this plan is excessively anti-wildlife. In an example, in the comparison of alternatives under wildlife habitat and fisheries management, the objective is "Sometimes this will mean other uses of land or war r to develop and maintain wildlife and fish habitat." We believe that some need for coordination is not proposed when other resource management programs are discussed. Does this imply that other resources have a higher priority, and therefore, the BLM has justify single purpose management? Are wildlife resources only to be managed within the constraints of other resources?

3 The preferred alternative recommends an increase in timber harvest, an increase in grazing, and an increase in minerals development. Wildlife outputs are to remain at current (1986) levels. However, the Wyoming Game and Fish Department (WGFD) have, with public hearings and BLM participations, revised management objectives for a number of big game herd units for the area. In 1987 (Appendix E). The RMP and DEIS do not include the revisions in the WGFD Strategic Plan for big game. The BLM agreed to these changes, many of which call for increases in big game populations, harvest, hunter success, and recreation days. Can the proposed RMP and DEIS accommodate these new population and management objectives developed in consultation with the BLM? Demands for wildlife and recreational use of public lands are growing in Wyoming. We do not believe the BLM has developed an integrated resource

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management plan which truly embraces multiple use management. Considering proposed increases in other resource uses that sometimes commodity impacts on wildlife and wildlife habitat will be eliminated under this plan.

We commend the BLM for its efforts to consolidate such a great deal of information. However, we never had the opportunity to review much of the information prior to publication of these documents. We have reviewed the proposed grazing and timber programs (listed in Appendix C). The RMP and DEIS do not contain much information on existing Allotment Management Plans, Forest Management Plans, Habitat Management Plans, or Activity Plans in MFPs or Limited Management Plans (Entampment River, Pennock Mountain, or Shirley Mountain MFPs). Presumably, the RMP and DEIS supersede these other plans, which then need to be modified to comply with the RMP. If these existing allotment management plans, forest management plans, and habitat management plans are integral parts of the overall RMP, why are they not reviewed in the RMP? We suggest these plans, which set priorities and drive resource management actions in specific areas, should be included in the RMP in enough detail to determine if these plans are compatible with and can be integrated into the RMP. The existing AMPs and FMPs have been developed with little public input. Some mechanism must be included in the RMP and DEIS to revise these "component" plans.

4 The large amount of information in the plan is difficult to analyze. It is almost impossible to treat impacts from one resource component or another (i.e., effects of timber management on wildlife or vice versa) because there are no goals or objectives for some resource programs. Other goals and objectives, as those for certain pieces of land, are included in other documents that are only briefly mentioned. This RMP does not integrate these management plans into an overall scheme. Analysis of the interaction of various resources programs (environmental consequences) and the resulting mix of outputs for various alternatives is compromised by this lack of coordination between resource programs.

The following critique of the RMP does not contain comments on the Coal Appendix which was being revised when the RMP/DEIS was released. We are reviewing this revision and will provide separate comments on the Coal Appendix in the near future.

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SPECIFIC COMMENTS

5 Page 18, Concerns Raised but not Addressed - The document does not address antelope-ratios creatively; it states that design of new fences will be addressed on a case-by-case basis. The RMP does not address concerns over existing fences on BLM lands which do not meet specifications for big game and respectively affect big game populations. Within a multiple-use resources management plan, objectives and actions should be proposed to remedy existing problems.

6 While "target" can be a synonym for "objective", the term "objective" is more appropriate for wildlife population figures.

7 Page 19, Fire Management - Critical should be "crucial".

The implication is that crucial habitat should be protected by full fire suppression. This may not always be the best choice because some crucial habitats may be improved by burning.

8 Page 19, Areas of Critical Environmental Concern (ACECs) - Other important habitats for wildlife should be considered for ACEC designation. We concur with the list on page 19 and believe that all of the areas listed should receive protection under ACEC criteria. The BLM are areas suitable of land that contain outstanding riparian, canyon and several big game species, including mule deer, elk, bighorn sheep and/or antelope. These areas of overlapping crucial habitats should have special management consideration (see Appendixes 2 and 3 of these comments).

9 We recommend the map and list of crucial habitats and areas of multiple species overlap in appendixes 2 and 3 accompanying these comments be used as a guide for locating sensitive wildlife habitats within the Medicine Bow/Routte Resource areas. These extremely valuable portals should receive the priority treatments outlined in the comments that follow. This map is based on herd unit overlays revised in March and April, 1987. The revised overlays are still being digitized, but the map in Appendix 2 is correct. BLM maps should be updated as soon as possible. This revision will significantly change areas of crucial habitat in the Platte Valley and the Laramie Range.

Page 23, Off-road Vehicle Management - We concur with the BLM's policy on off-road vehicle management.

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10 Page 38, Chapter 2, Table 4, Areas of Critical Environmental Concern - All areas of multiple crucial habitats overlap map presented 17 should be given the ACEC designation. The importance of these areas can not be overstated, and they should be afforded complete protect from any detrimental disturbances. Some of these same areas should be withdrawn from consideration for mining because of their high value for wildlife habitat. In most cases, mining would permanently destroy their wildlife value or result in long-term habitat degradation equivalents extensive and lengthy reclamation which has yet to be successfully demonstrated in Wyoming.

11 Page 39, ACEC Designation for Areas in Limited with Other Uses page 1053 - Sierra Madre Mountains Delowned, Encampment River, Pennock Mountain Energy, and the National Wildlife Federation, we recommend that the northern portion of the Encampment River Canyon from Allentown to Cow Creek be designated as an ACEC. This was one of the last canyons we discussed in the spring of 1985 when the Atlantic Rim Coal Tract was being debated. We thought the BLM was in agreement with this designation as well as other participants in the meeting. We support the Encampment River development. Preliminary, the coal reserves in this area are minimal, the Rainbow-Saw Creek trail in the Atlantic Rim area is maned and reclaimed have been stimulated. It was also agreed at these meetings that oriental Rim should not be declared available for mining as this time as the company proposing to mine the coal there had ceased to pursue mining now. None of the discussion outcomes agreed upon at these meetings have surfaced in this document. For reference, these mitigation measures are included with these comments.

There is little or no concern for energy development impacts on the Freeze Rim herd shown in this document. Neither the lack of concern for the loss of elk habitat is acceptable. More work is needed to create a development plan that will reduce the initial loss of habitat with resultant loss of animals, and mitigate long-term damage to the habitat. Based on what we read here, and in order to meet previously agreed upon wildlife objectives we will be forced to actively oppose this lease.

12 Page 32, ACEC, Raptor Concentration Areas - All areas of bald eagle nesting and roosting habitat identified on the maps from the WGFD Wildlife Land Use Management Plan (Appendix 3) should be "red flagged" or given an ACEC designation. These important habitats are not given adequate protection by this document. This action should be taken in addition to the general restrictions put on raptor concentrations.

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13 The document indicates one objective of raptor management is to "allow for development of coal and oil and gas". This is not a raptor management objective, it is a mineral development objective. Rather, the objective should be to protect sensitive raptors in these areas from detrimental effects of developing coal, oil and gas.

We are disappointed to see that this section is so weak, since raptors are federally protected. We recommend all the areas included in Alternative C favorably be included in this designation. In our opinion, it is going to be very difficult to protect important raptor concentration areas while increasing oil and gas and coal production for the same geographic areas.

14 Page 29, ACEC Designation for the Sand Hills - We are pleased to see this important winter habitat range included in this designation, but cannot concur with oil and gas exclusivity in this extremely sensitive area. Reclamation success from one well already drilled in the south side of this winter range consies from one well already drilled in the south side of this winter range consies from one well already drilled in the south side of this winter range consies indicates reclamation is not possible in the sandy soils in this area. We recommend the area have no oil and gas activity.

15 Page F 28-41, Forest Management - The preferred alternative recommends increasing annual timber harvest by 2025 (its 3 million board feet) over current levels during the next 5 years. We question where and how sales current levels during the next 5 years. We question where and how sales current levels during the next 5 years. We question where and how sales

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Alternative B would adequately address the above concerns (wildlife, watershed, and riparian). We strongly recommend the BLM adopt the proposed management actions under Alternative B.

28 Page 43, Range Improvements - The preferred intensive program construction of 130 miles of fence, 113 water developments, and manipulation of 69,000 acres of vegetation to improve livestock grazing in "I" category allotments. Wildlife habitat undoubtedly will be adversely affected by many of these projects. Appendix B lists the allotments where treatments are proposed and indicates where there are existing or potential wildlife conflicts with these management actions. To contend comment with any project that is detrimental to wildlife and will be forced to oppose any E.A. developed to analyze the effects of such projects.

It is impossible to make a meaningful, site specific analysis at this level of planning (DMP). This concerns us, since this document will drive management of public lands for some time. The BLM should prepare an E.A. on these projects. The EIS and DMP should not be the sole decision documents for these projects. Documented projects should be reevaluated, modified, or withdrawn. There is potential to improve both wildlife habitat and grazing. Both of these objectives should be criteria by which these projects are evaluated, designed, and approved.

29 Page 50, Minerals Management - The situation regarding Atlantic Rim and Northeast Cow Creek has already been discussed. Standard mitigation measures are not adequate for these two locations. The suggestion that we lower our population objectives for these herds to offset the impacts from these developments is contrary to mitigation measures agreed to in meetings held in the spring of 1987. It was agreed at the above-mentioned meetings that livestock use would be lower in the Atlantic Rim and Cow Creek areas to offset the loss of wildlife habitat from the Atlantic Rim lease.

30 Page 51, Oil and Gas - The current status of the proposed Seven Oil EA is not discussed anywhere in this document. We have already gone on record as being opposed to this activity until suitable mitigation is agreed upon. To our knowledge, the BLM has not addressed the concerns of the U.S. Fish and Wildlife Service over potential impacts to wintering bald eagles.

31 Page 56, Minerals Management-Withdrawals - There are many wildlife areas with high habitat values that should be considered for withdrawal. The BLM has recommended only recreation sites for this purpose. We recommend addi-

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31 tional areas for withdrawal based upon areas of high wildlife value identified by the WCFO Wildlife Land Use Management Plan (appendices 2 and 3).

32 Pg. 58, Increasing Sites - The BLM proposes to develop recreation sites at Prospect Creek, Shirley Mountain, Battle Mountain, and Jack Mountain. We don't believe it is appropriate to develop recreation sites in important perturbation areas or winter range for big game. The BLM does not give legal descriptions of the sites, so it is difficult to determine their exact location. Conflicts with wildlife could occur at all proposed sites. The Jack Mountain site could be a major problem unless it is open only from May 15 to November 15 and only a few acres of habitat are disturbed by its development. We prefer the site not be built, and suggest retention of sites with no such ecological problems.

33 Page 65, Wildlife Habitat and Fisheries Management Objectives - The DMP states one objective for wildlife/fisheries is to coordinate with other uses of land or water. Other objectives are to provide good wildlife habitat within the constraints of multiple-use management and to allow for development of coal, oil and gas. We feel it is inappropriate to place these "conflicts" on wildlife and fisheries management objectives. This is the basic theme of the document, though wildlife and fisheries will exist where they can either reasonably coexist or be mitigated. The statement that "Under the management emphasis, recreation should be "pro-active", not viewed as a constraint on other resource development activities. In our opinion, it is apparent that wildlife and fisheries habitat management have lower priorities than other programs. In fact, the wildlife and livestock programs are constrained by these resource development programs. This DMP does not represent a balanced multiple-use management program.

Page 67, Wildlife Habitat and Fisheries Management-Actions - We concur with the need to develop AMPs as indicated in the DMP. These AMPs should include the need for ACECs noted above. Habitat management plans need to address all wildlife species crucial overlap areas shown on the map located in Appendix I. These areas have been determined to be the most important crucial areas within the resource management areas. Because of their crucial areas within the resource management areas. Because of their crucial areas, the habitat quality of these areas should be monitored closely and habitat improvements made if necessary.

The DMP states several habitat improvement actions will take place on a variety of important wildlife habitats. It does not, however, indicate the number of acres to be treated annually or the project locations. Targets

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34 and locations for improvements should be presented in the DMP. In addition, there should be some means of prioritizing these habitat improvement projects so dollars and manpower needs can be linked to these projects in an efficient manner. We recommend the BLM use the Wild Wildlife Land Use Management Plan to establish these priorities (see Appendix 3). The DMP narrative sections would be incorporated to improve riparian habitats, but does not define to what degree will they be improved. We have indicated in our comments on grazing to maintain areas that goals and objectives for improving riparian habitat are inadequate. Enclosure - have been no priorities presented, it will be very difficult to evaluate the success of this proposed action. Other comments included in concerns addressing the Livestock Grazing Management section of this document are pertinent to this discussion.

35 Page 70, Wildlife Habitat and Fisheries Management - We don't feel the BLM is going far enough in trying to deal with the poor condition and continuing degradation of many important riparian areas. In fact, the proposed activities will barely improve more than 1% of these areas. This objective was apparently met at a very low level because the overall goal of the DMP is to increase livestock production. The riparian habitat goal can't be improved if there is to be improvement in areas that are currently overgrazed. We question the need to increase livestock production when there are currently tens of thousands of AUMs in the forest category because of the BLM economic conditions. Because of this, we question the need to alter important wildlife habitat to increase livestock production. As far as we can determine, little if anything is being done to improve important wildlife habitat, a resource for which there is increasing demand.

36 Page 73, Wildlife Habitat and Fisheries Management-Consolidation of Ownership - We recommend the BLM consult the WCFO Wildlife Land Use Management Plan to determine what public lands should be consolidated to provide the most benefits to wildlife. We strongly recommend the BLM try to consolidate, rather than sell its holdings in Lavaca County on either side of the Tongue Jack Road (Section 21(3) as presented in Map 10 (page 78). This area is critical mule deer habitat on the new WCFO overlays. Sale of this land could inexpensive habitat losses from subdivision development. We recommend the BLM block up their holdings, maintain this area in public ownership, and protect crucial mule deer habitat.

We also strongly recommend the BLM consolidate its holdings along the edge of the National Forest from Lake Basin to Mill Creek (Map 9, page 77). The

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36 BLM should attempt to improve public access to National Forest lands, protect big game winter range, and improve access to Lake Bertha. No parcels should be sold if the sale would compromise the above resource needs.

37 Page 72, Map 3, Fire Suppression Areas - The entire winter range for the Sage Antelope DMA should be included in the Full Suppression with Management Alternatives. Important antelope winter range complexes should be protected. However, the option to improve winter range through fire management should be available. The specifics of this option should be carefully coordinated with local WCFO personnel.

38 Page 73 - "Approximate" locations of sage grouse strutting grounds shown in Map 5 are liberal. Several known leks are omitted, and locations of many others are several miles from their actual locations. The BLM should contact local WCFO personnel for more accurate locations.

39 Page 74, Map 7, Land Ownership Adjustments - We cannot agree to any exchanges that would take important mule deer winter range north of Range 101 W. (Section 21(3) as presented). This area is designated as such and the BLM was contemplating taking this action. The BLM lands in this area are crucial to maintaining current population levels. Their loss or consolidation will increase if the BLM purchase the Seven Oil and Gas project. Almost all of the deer displaced from that area will have to winter north of Beggs. We suggest the BLM should be improving the carrying capacity of this area instead of trading it to private ownership.

We are also opposed to land exchanges along the west edge of the Medicine Bow National Forest boundary. Again, many of these areas are winter range for deer and elk and should be maintained in federal ownership. Trades for land will seriously hinder population maintenance and existence for [illegible] such as Tenderfoot Reservoir.

Page 95, Wildlife and Fisheries - Again, we are opposed to leasing Atlantic Rim and Northeast Cow Creek until the necessary mitigation is in place.

40 Page 106, Affected Environment - The predominant use of the Chain of Lakes Proposed ONA is for antelope winter range. Recreation and production of kangaroo and waterfowl are other major uses. Livestock grazing is a minor use, due to lack of available forage and water.

41 Page 109, Affected Environment-Forest Resources - The DMP indicates the major wood users in the planning area spend 20 to 40 million board feet of

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41 timber. We believe this figure is grossly inflated. The Forest Service, in the Medicine Bow National Forest Plan, reported annual utilization by area mills was about 25 million board feet over a 10-year period prior to preparation of the Plan. The Medicine Bow National Forest indicated 27 million board feet of timber produced on its lands could meet the needs of local mills. The proposed annual production of 3 million board feet on BLM land is a minor contribution to the local economy. The need for this contribution, given the past record of use by these mills, is questionable. We recognize timber harvest on BLM lands is a legitimate goal, but feel its importance is overstated by the BLM. The BLM timber harvesting program should be used to achieve other resource management goals such as big game habitat improvement and relief of category "2" allotments.

42 Page 122, Map 35, Oil and Gas Fields - Again, we are opposed to the proposed activity in the Savery area until suitable mitigation has been established.

42 Page 132, Developed Recreation Areas - We need to know the location of the proposed recreation area on Battle Mountain. A location on the south or west side of the mountain would reduce the amount of winter range available for deer and elk. This plan should not further reduce big game winter range for the sake of providing camping in an area where there are currently no access problems.

43 Page 165, Vegetation Types - The description of the green vegetative type states that "wildlife also use the grass during the spring season". This implies the species of wildlife. Some may use this vegetative type depends on the species of wildlife. Some may use this vegetative type with "big yearlong, some not at all. This MUP frequently equates "wildlife" with "big game". BLM lands provide habitat for a variety of wildlife, each with its own habitat needs and varying uses of vegetative types.

44 Page 174 - As mentioned above, the use of the term "edible" in the description of the saltbush vegetative type should be "some big game" or "some wildlife".

45 Page 174 - The juniper vegetative type is also found in isolated pockets in the Haystack Mountains north of Sinclair and in breaks along the North Platte River from Sage Creek to the lower dampen.

46 Page 173 & 175 - Use of the term "harvest" to describe such habitat types as mountain mahogany or timber is.no woodland is inappropriate and erroneous. Since these steep, rocky areas are often quite important to some wildlife

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46 species, a term such as "spares vegetative type" would appear be more accurate.

47 Page 177, Ecological Condition and Trend - One objective for this management plan should be to collect recent condition information for all grazing allotments. Monitoring of condition classifications should be conducted every 3-5 years.

48 Page 179, Riparian Vegetation Condition - According to Table 20, 918 of the riparian areas within the Sweetwater Area are in fair to poor condition. It there is no plan to upgrade these important habitats. We recommend an objective for improving these areas be set, with a plan of action and initiation and completion dates.

49 Page 183, Affected Environment-Wildlife - Mongame birds, nongame mammals, and other non-game species are rarely mentioned in this plan. Many forbearers, and upland game animals should be addressed in this plan. Many planned activities, as well as current management actions, affect population levels and diversity of these species. This is especially true for those species associated with riparian/wetland complexes and big sagebrush and mountain shrub types.

50 Page 183, Table 31, Management Priority by Species and HMP or Cooperative Agreement Areas - Elk should be a high priority for the Encampment HMP and the Shirley Mountain elk range management under cooperative agreements with the BLM. Mule deer should be a high priority in the Shirley Mountain and Encampment HMPs and on the WCFD Laramie Peak and Sybille winter ranges. Mule deer should be priority species on the Rock and Pennock winter ranges. Antelope should be a high priority for the Shirley Mountain HMP. Pronghorn antelope should be a high priority for the Laramie Peak Big Game Winter Range and the Ferris Mountains. Bald eagles should be a high priority in the Ferris-Seminoe and Shirley Mountain (Miracle Mile area) HMPs. Bald eagles should be a priority on the Laramie Peak Big Game Winter Range.

51 Page 183, Table 31, Management Priority by Species for the Proposed HMP Areas under Alternative C and D - Elk should be a high priority in the Saratoga HMP. Mule deer should be a high priority in the Saratoga Valley and Laramie Peak HMPs. Bald eagles should have a high priority for the Saratoga Valley HMP. The Saratoga Valley contains some of the highest densities of nesting bald eagles in Wyoming, with 5 out of six nests active in 1987. Another nest lies just south of the Wyoming/Colorado border along the Little Snake River. Saratoga Valley produces a significant portion of the

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51 bald eagles in Wyoming outside the Yellowstone ecosystem. Special management should be developed to protect and enhance this endangered species.

52 Page 186, Wildlife Habitat - The HMP is incorrect in stating that low-priority habitat types "can be more heavily used by conflicting resources without causing significant wildlife impacts between of their abundance and lower wildlife value". While this is generally true, there can be circumstances where these habitat types are of high value to important species due to their exposure, aspect, slope, etc. The low priority assigned to these habitats is related to their abundance, productivity, and low species diversity, but they should not be categorically assigned to heavier uses.

53 The planning area has six species of resident big game, not five. HMP neglects moose, which are present in the Platte Valley, and are resident in low numbers in the Ferris-Seminoe HMP area. There are also several moose in the Laramie Peak area.

54 Page 187, Ranking of Standard Habitat Types - We do not agree with the BLM ranking of certain habitat types. From our standpoint, the important crucial winter range complexes that are predominantly sagebrush-mixed grass or mixed shrub stands are vital to the maintenance of the MUFO objectives for big game, including elk.

55 A footnote in Table 33 incorrectly states that the timber pine habitat type is only found in the Medicine Bow Resource Area. It is found in the Divide TA on Lost Soldier Divide and Atlantic Rim, but may not have been delineated when habitat types in those areas were mapped.

56 Page 188, Map 47 - Map 47 omits the Steamboat elk herd unit in the northwest corner of the planning area (herd number 424), and the Green Mountain herd unit.

57 Page 194, Map 48 Herd Unit Boundaries - We have combined the Kegge and South Wamsutter mule deer herd units and the South Wamsutter and Black Butte antelope herd units. The new herd objectives are attached. It should also be noted that the distribution overlaps for all big game species have been updated, and there are some substantial changes from maps used to produce this document.

Map AE omits a small part of the Sweetwater mule deer herd unit just north of the Chain Lakes herd unit.

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58 Page 193, Map 52 - Since Map 53 shows only crucial winter range and calving areas for elk and excludes the larger summer, winter, and yearling ranges, it should be titled "Crucial Elk Habitat" or "Priority Elk Habitat" rather than simply "Elk Habitat".

59 Page 195 - As mentioned earlier, seasonal ranges for big game herds are updated regularly and may change as better information becomes available. Delineated crucial winter ranges for the South Ferris and North Ferris antelope herd units have changed considerably from those shown on Map 54.

60 Page 196 - Delineated crucial winter range for the Ferris highorn sheep herd unit has been updated with substantial differences from that shown in Map 55.

61 Pages 197 & 198 - There are several typographic errors or omissions in Table 34. In addition, several population objectives have been recently changed, along with herd unit seasonal distributions. Corrections include:

Antelope:

Iron Springs - occupied habitat has been omitted (300,000 BLM acres)

North Ferris - probably close to 40 percent of the herd winters in the planning area.
- occupied habitat has been omitted.
- distribution delineations for this herd were updated this year, and include crucial winter ranges in the planning area.

Bighorn Sheep:

Ferris - occupied habitat is well over 800 acres.
- distribution information for this herd was updated the past year, with increased crucial winter range on the Ferris Mountains.

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61 Elk:

Shannock - occupied habitat has been omitted.
Green Mtn. - portions of this herd unit are included in the Red Desert HMP, not the Bagge HMP.

Mule Deer:

Chain Lakes - occupied habitat has been omitted.
Overthrust - >100 percent of this population would be in the planning area.
Owensmother - the Green Mountain herd unit was combined with part of the Beaver Rim herd unit in 1985 to create the Owensmother herd unit (Number 644).

62 Page 147-155, Table 34, Big Game Herd Unit Area Data - The population and management objectives were revised in March, 1987 as part of the WGFD Big Game Strategic Plan update after consultation with the BLM. The distribution maps were revised in April, 1987. The BLM should incorporate the most recent 4rd unit objectives and distribution maps into the final EIS and ElS. ...ble 34 will change substantially. Appendix B lists changes in herd unit population objectives. The Green Range moose, Seedskadee trophy whitetailed deer, and Laramie River white-tailed deer herd units were left out of Table 34.

63 Page 198, Table 36 - The current population estimate for the Ferris elk herd is 325 to 350 elk, not 426. Riparian habitat and aspen/conifer stands in the Ferris-Seminoe HMP area are important to the Ferris elk for thermal and escape cover, and as calving habitat. Crucial winter ranges for this herd are generally treeless, wind-blown ridges.

64 Page 207, Table 39 - Acreages for antelope and bighorn sheep crucial winter ranges in the Ferris-Seminoe HMP area need to be updated to coincide with recent changes in distribution delineations. A total of 25 active sage grouse leks have been documented for the HMP area, not 16 (only 4 of the 25 were discovered in 1987 surveys). The recently discovered leks should be added to locate for the Green HMP area.

65 Page 210, Shirley Mountain HMP Area - The HMP indicates the Shirley Mountain area will be managed to provide adequate cover for elk. It cites the need to maintain a 40% cover:60% forage ratio, but the forage:cover ratio is

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65 misspelled. According to Thomas et al. (1979), this evaluation should be applied to at least a 3,000 acre analysis area. In Colorado, it is estimated that the minimum viable elk population would require approximately 3,000 acres of optimal habitat in forested communities (Torry 1986). This cannot be applied to a timber sale area or other parcel of land that is too small for analysis. The Shirley Mountain HMP currently provides a cover:forage ratio of 40:60% if the entire occupied summer range on Shirley Mountain is included in one analysis area. There are several parts of Shirley Mountain where analysis areas will be below optimum if more timber is cut. The proposed acceleration of timber harvest in the HMP will cause significant conflicts with attempts to maintain effective elk habitat.

66 Timber harvesting will temporarily (about 20 years) remove cover from areas that are clearcut. The loss of cover translates into a decrease in habitat quality below optimal conditions. The increase in roads (even temporary) will further reduce habitat effectiveness. Extensive logging activity will displace elk from portions of the mountain. If these elk move off the mountain in areas of predominantly private land, damage problems may result. This is particularly true if these displaced elk start to use hay meadows around the base of the mountain.

67 Page 200, Encampment Riverbank Sheep HMP Area - Bighorn sheep, elk, and mule deer are all high priority species in this HMP area. Wildlife objectives should address needs of these big game species. The HMP was developed to facilitate reintroduction of bighorn sheep into the area. Management objectives were developed to emphasize habitat management for bighorn sheep. Some areas of crucial habitat are in poor condition due to overuse by livestock or uncontrolled recreation.

68 Page 200, Saratoga Valley Area (Proposed) - Antelope, bighorn sheep, elk and mule deer are all high priority species in this proposed HMP area. Antelope and mule deer crucial winter ranges are threatened by habitat losses from subdivisions, agricultural development, and overgrazing. Bighorn sheep habitat is of a premium, and areas are in poor condition as a result of overuse by ungulates or ecological succession.

69 Page 200, 201, Laramie Peak HMP Area (Proposed) - Despite the BLM having signed a Memorandum of Understanding with the WGFD and the USFS to cooperatively work on improving bighorn sheep habitat in the Laramie Peak area, there is no mention of bighorn sheep in the proposed action for the Laramie Peak HMP. It is recommended the BLM be considered part of the HMP.

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70 Antelope and mule deer are also high priority species in this HMP area. The habitat needs of antelope, bighorn sheep, elk, and mule deer should be addressed in this proposed HMP.

71 Page 201, Jelm Mountain HMP Area (Proposed) - The BLM cites the need to maintain and improve elk forage ratio by the use of timber harvesting. In this HMP area, BLM land is located along the fringe of the National Forest on elk transition or winter range. The cover:forage ratio should be applied to areas not forested that is forested elk habitat. Most of this analysis area is on National Forest land. It is inappropriate to apply the guideline for forage:cover ratios to 200 or 640 acre parcels of land. Timber harvesting must consider the need of cover for escape and of timber as elk hiding cover or thermal cover (Thomas et. al. 1979). Management of this timber must be done also by site (Appendix B). There are opportunities to enhance big game winter range and transition range. Timber harvesting can also be inappropriate in some areas.

72 Antelope and mule deer are also high priority species in this HMP area, and their habitat needs should also be addressed.

73 Page 203, Deer - Discussion of the winter requirements of mule deer should mention their heavy use of wind-blown ridges where forage is available. Their topographic features, found on many crucial ranges, is essential for their use.

74 Page 203, Pronghorn Antelope - Besides the mentioned habitat requirement of succulent forbes, pronghorn also require significant open space and available water, and they generally prefer varying topography. Water and succulent forage (primarily forbs) are important to lactating females. Many of the pronghorn herds in the planning area make extensive migrations to and from winter ranges. Maintenance of these movements is a primary management concern. Winter ranges generally contain much topographic relief, providing a variety of microclimates for feeding, resting, and escape. Shrub habitat types predominate in many important winter areas (all of those in Sheridan Vil. As with deer and elk, wind swept ridges and slopes are used because of available forage. Livestock management practices can create conflicts with pronghorn management through fencing, competition for forage, and cheatgrass conversions. Identification and modification of range areas that create impediments or barriers to pronghorn are actions included in at least two areas (Ferris-Seminoe and Red Desert). Any surface disturbing resource use has the potential to impact pronghorn management.

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75 Page 203, Sage Grouse - The statement that sage grouse avoid large stands of dense sagebrush is true most of the time, but these areas are often used for cover and forage during winters with deep snow cover.

76 Page 203 - Sage grouse breeding/courting grounds on Map 14 appear to be complete for the Ferris-Seminoe HMP area, however, only 4 leks discovered during the 1987 surveys are shown on the map. Updated lek maps are missing or inaccurately depicted in the Red Desert HMP area. Updated lek inventories are available from Fred Lee and Fish Department Biologists.

77 Page 204, Map 14 - The Shoshone and Ice Atlantic Pin Raptor Concentration Area should be extended southward along the rim to encompass recently discovered goshawk, Cooper's hawk, and red-tailed hawk nests.

78 Page 208, Wild Cattle - This section de-emphasizes the importance of the Seminoe Area to nesting bald eagles. There are 4 nest sites along the North Platte River, the largest concentration in Wyoming outside the Greater Yellowstone Ecosystem. There is no mention of the bald eagle nest just across the Colorado/Wyoming border along the Little Snake River. Management actions within Wyoming could have an impact on this nest. Takes see comments on Tables 21 and 223.

79 Page 208, Mountain Lion - The list of areas with recent sightings of mountain lions should include the Ferris Mountains, Seminoe Mountains, and Fedre Mountains.

80 Page 210, Consumptive Use Purposes - This section does not address the effects of the currently proposed revenues with the State Board of Land Commissioners. Most of the BLM timber lands overlooked in this plan could become state lands.

81 The DMP indicates the long-term sustained yield capacity is 24 million board feet of timber per decade. This can only be perceived at the timber resource lands on forested areas are ignored. Most BLM land is not suitable for commercial timber production, except scattered patches in the Shoy, Laramie, Sierra Madre Range and on Shirley Mountain. The BLM should use timber harvesting to achieve other resource goals, which are far more significant to the people of Wyoming than the small amount of timber produced on BLM land within these resource areas.

The PMP and DEIS propose subordinating other resource uses of forested land to maximize commercial timber targets and objectives. We suggest the BLM reverse this management philosophy.

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82 Page 217, Assumptions for Lands Program - We question how "demand" for disposal of public lands is measured. Does it include requests by land speculators as well as bona fide needs of communities? More details are needed here.

83 Page 217, Loveable Minerals-Coal - Reclamation usually requires disturbed areas be returned to a state equal to or better than the pre-disturbance condition. As stated later in the EMP in several sections, reclamation will probably not be successful on the Atlantic Rim coal tract. The assumption probably not be successful on the Atlantic Rim coal tract. The assumption that reclamation would be accomplished 12 years after the end of mine life is certainly not valid in this case, and is unproven on many other coal tracts. Reclamation of the high priority juniper and mountain shrub habitats on the Wild Horse Draw tract is unlikely, if not impossible.

84 Page 220 - As stated later in the EMP, reclamation of oil and gas drilling sites has not always been successful. Therefore, the assumption that all dry wells and 50 percent of the disturbed area for successful wells will be reclaimed within three to five years may not be true. Achieving this reclamation success should be an objective of the resource management plan, with mation success should be an objective of the resource management plan, with mation success should be an objective of the resource management plan, with actions proposed to attain the objective (such as seeding rates and reductions proposed to attain the objective (such as seeding rates and reductions proposed to attain the objective (such as seeding rates and reduct

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101 Page 266, Management Actions for Minerals, Leasable Minerals-Coal - The restriction on impacts to wildlife from the Morris Indian Springs strip property to mention impacts on big game, particularly pronghorn. While impacts may be outright, they must still be identified and addressed. Note: at all of the tract is pronghorn crucial winter range and mule deer and elk yearling range. Access to and from the entire coal seam with a paved road from Castlerock over intermittent BP crucial winter range hills (from higher vehicle speeds and harassment) and illegal kills (from increased access).

102 Page 267, Management Actions for Livestock Grazing - The RMP lists range seeding as an action for alternative A, for about 11,500 acres. If this action is proposed, seeding should be described in the list of possible range improvements in the Livestock Grazing Appendix. Of particular concern would be the type of seeding that is anticipated (native species vs. crested wheatgrass). Use of crested wheatgrass seedings is essentially a conversion of a multiple-use range into a single use monoculture, an action we strongly recommend against. Such projects should be designed to meet range improvement objectives in adjoining areas, rather than simply favoring public lands for a single user.

103 Discussion of habitat losses to coal in the "Sagge crucial winter range" should specify that this is the Sagge elk winter range.

104 Page 269, Management Actions for Wildlife and Fisheries - The RMP reiterates that reclamation costs could preclude some oil and gas developments. Any such area is not worth developing, the economics are too marginal. See comment for page 252 on this matter.

105 Page 270, Management Actions for Minerals, Leasable Minerals-Coal - The RMP is incorrect in stating that development of coal would adversely effect recreation only in the Atlantic Rim area. The two Indian Springs coal tracts are popular hunting areas for pronghorn, cottontail, elk, and mule deer. While populations may not be greatly affected, local densities, access and hunt quality will be. The same would occur on the Wild Horse Draw tract for pronghorn and mule deer. Proposed access for this tract on the Dugout along the North Platte River could have major negative effects on recreation by reducing the quality of fishing and river recreation. Negative impacts to the Sagge elk herd from mining on Atlantic Rim would reduce elk hunting quality for the entire northern segment of the population, not just on the rim itself.

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106 Page 274, Effects on Vegetation, Rangeland Taxonation - What "degraded sites" are proposed for seeding projects? Are these unreclaimed disturbed areas, or just sites that do not produce enough grass to meet grazing allotment objectives?

107 Page 277, Management Actions for Minerals, Leasable Minerals-Coal, Atlantic Rim - The RMP states that on the Atlantic Rim coal area "Full restoration of the land and its vegetation is the promising condition would require a longer time (than a few years)". The previous section on Soils, Water and Air considers stated that reclamation of this vegetation is "unlikely". The first statement above should be eliminated, as the plan says much reclamation is "questionable".

108 Page 278 - The RMP states that recommended mitigations on the Atlantic Rim coal tract would make the effects of mining on elk during severe winter "minimal". The recommended mitigations would reduce impacts, but they would not be minimal. Displacement of resident elk to adjoining sagge habitats may occur, but these sites must be less preferable or the elk would not now be using habitats on the coal site.

109 Page 281, Effects on Livestock Grazing in the Preferred Alternative - The RMP states grazing efficiency would be developed for intensive management on 13,020 acres of crucial winter range for big game. It is unclear to this agency where, when, and how this will take place and how the 13,020 acre figure was determined.

110 We recommend AUMs be developed for all areas of multiple species crucial range overlap and that these areas be identified as a high priority for range and grazing evaluation and monitoring. We recommend in the comments on Livestock Grazing Management that grazing be carefully evaluated, with removal or shifting of livestock use to other areas where severe livestock-wildlife competition does not exist.

We recommend no grazing allotments within areas of multiple species crucial range overlap should be given a "C" or custodial designation.

111 All range treatments and timber cuts should be coordinated with the WGFD to ensure that wildlife benefits are maximized and adverse impacts are avoided.

112 We question how and why it was determined that 80% of any additional forage produced by range projects on "I" category allotments would be allocated to

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112 livestock. Why are wildlife not given a larger proportion of this increase? The RMP states that 47 acres of riparian stream zones would be managed to improve the habitat to at least good condition with an additional 1,500 acres improved through the AMPs. Considering their importance to hydrology, erosion control, stream stability, fish, and wildlife, we suggest that all riparian areas be managed for good to excellent condition. As indicated earlier in our comments on Livestock Grazing Management, we do not believe riparian habitat management has been adequately addressed. Refer to our statements addressing riparian areas (page 48 of the DEIS for additional comments.

113 The 1,079 AUMs of additional forage that will be produced through clearcutting from timber sales proposed in the RMP will be available for livestock grazing. It would seem some of this increase, particularly since wildlife will be impacted, should be allocated to wildlife on these areas. This should not be used to solely augment an increase in livestock permit numbers. Forage produced on clear-cuts may last only 10-25 years. This transitory forage can be used to improve or correct existing grazing problems. We have proposed opportunities for improve elk and bighorn habitat. The forage produced by these cuts must also be available for big game, not just livestock. Timber harvesting should be used as a management tool to improve other resource values. Once again, it appears that wildlife is not a high priority in management actions proposed in the RMP.

Page 286, Environmental Consequences - Again, we fail to see how the BLM can justify increasing livestock over 20% above the last five year average licensed use, especially considering how important this area is to all species of wildlife. Most areas are at good to excellent trailcondition and some of the highest drawing areas in the state for residents and nonresidents. This area is in extremely high demand for hunting, and the BLM should recognize this fact. To neglect its appropriate for the Bureau to look at ways to improve wildlife carrying capacities, as much more could be done for the state's economy than if they increased livestock AUMs at the expense of native wildlife.

Page 286, Management Actions for Minerals, Leasable Minerals-Coal - Comments made about mining impacts on recreation for page 270 are the same here.

114 Page 291, Effects on Vegetation, Riparian Vegetation - Riparian area protection and improvement should be a high priority due to the importance of riparian habitat to wildlife and because of the numerous other important

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114 functions that habitat type performs. An aggressive program of fencing not reduced or eliminated grazing pressure will be implemented. The preferred alternative does not provide an aggressive program, it excludes grazing from only 47 acres compared to 436 acres under Alternative B.

115 Page 293, Effects on Wildlife and Fisheries in the Preferred Alternative - No time frame is given for completion of the allotment evaluation for determining range condition.

116 Page 295, Map 62 - Based on recent raptor surveys, the raptor concentration area on Atlantic Rim should be extended southwest to at least Hay Gulch. The Platte Divide raptor concentration area should be extended southeast to include golden eagle nests along the North Platte River.

117 The legend for Map 62 does not provide sufficient information to show which raptor concentration areas will have only seasonal restrictions and which will have surface disturbance restrictions. However, Table 1, page 33 does list protected areas. Assuming we have correctly identified the preferred alternative, only 39 of 27,500 acres (Shamrock Hills and Seminoe areas) would surface-disturbance activities be seasonally or permanently restricted during nesting habitat. This intensive management would entail year-by-year examination of prospects to determine potentially adverse and appropriate mitigation to minimize those effects. Given that these are raptor concentration areas, not just individual nest sites, intensive case-by-case management should occur on all 190,000 acres of raptor concentration areas. As a minimum, it should occur on areas with the highest concentration of raptors. According to WGFD raptor maps (which do not contain all raptor nests), Atlantic Rim and Red Rim support the greatest concentrations of nesting raptors in the Rawlins area. Cherokee, Shamrock Hills, Bolton Rim, Daly Mountain, and Muddy Creek support the next largest concentrations with the other six areas supporting smaller numbers. There is no discussion of why Seminoe and Shamrock Hills were considered more important to be designated ACECs, while areas with greater numbers and species diversity like Atlantic and Red Rims were not. What appears to be occurring in this document is an increased emphasis on mineral and energy development with a decrease in protection for raptors.

118 We support a case-by-case analysis of proposed development activities and their impact on raptor nesting concentrations. We will work with the BLM and industry to allow development while obtaining necessary protections for raptors. However, we are opposed to destruction of nesting habitat in any raptor nesting concentration areas.

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Pages 327-334, Forestry Appendix - See Appendix 7 of this analysis for issues, concerns, opportunities, and conflicts with timber harvesting and the management of wildlife habitat. Refer to our comments on Forest Management, Affected Environment, Forest Resources, and Assumptions for Forestry for further information applicable to this section of the DFR and DEIS.

119 The Forest Appendix states there will be a 100 foot buffer along riparian areas starting at the water level. Riparian areas are more than just aquatic habitats, and the 100 foot buffer should begin at the outer edge of the riparian vegetation, not the water level.

The Environmental Consequences section of the preferred alternative for timber states the harvest level would increase about 50%. However, in the comparison of alternatives, the preferred alternative states the harvest level will be accelerated for the first 5 years. In fact, the new harvest level represents a 300% increase in the first 5 years of the plan. We recommend the present harvest rate (average for 1976-1986) be maintained over the next 10 years.

120 Page 332 - Each of the first six limitations placed on timber harvesting to protect raptor habitat have the catsge clause "if" inserted. who is to determine if activities will result in nest failure, abandonment, etc., and by what criteria? Limitations should be applied in all cases, and then waived only when it has been demonstrated that the activity will not have an adverse impact.

121 Pages 345-456, Livestock Grazing Appendix - Appendices are of this analysis summarize the issues, concerns, wildlife conflicts, and recommended management thought that we believe the BLM should adopt if they are to adequately address the needs of wildlife and protect and enhance wildlife habitat in the Medicine Bow/Divide Resource areas.

We recommend areas with overlapping crucial winter range for 2 or more big game species be considered for the "1" category of management. We have also recommended the "1" category for a few allotments that are crucial winter range for only one species which has significant problems (i.e., herds 4519, 4515, 4516). Some allotments should be designated Areas of Critical Environmental Concern. Withdrawal of livestock grazing from some of these areas would address some resource conflicts and improve habitat conditions. In allotments with crucial big game winter range, spring grazing should not be allowed.

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For further concerns and details, see comments on ACEC's, Livestock Grazing Management, Riparian Areas, AMP's, Range Improvements, and Effects on Livestock Grazing in the Preferred Alternative.

122 Page 363, Livestock Grazing Appendix, Trend in Ecological Condition - Calculations of condition class index for this allotment do not include the variability or error inherent in the original data. It is quite possible that the difference between the old 57 percent and recent 61 percent represents variability in the measurements, rather than actual improvement. If the variability is great enough, the trend could be in the reverse direction. Since vegetation is not always measurable, at least a reasonable threshold should be applied before a determination of trend is made.

123 Page 367, Range Improvements - Descriptions of the various types of range improvements should include the range seeding proposed for 11,300 acres and the exceptions proposed for several allotments.

124 Page 373 - Fences should be constructed to BLM specifications for antelope passage in areas where antelope occur, not just in areas where "major antelope migration routes occur" as stated in this section on fences. Fence design may need to comply with somewhat higher big game specifications.

125 Page 375 - In-stream structures are effective range improvements with a multitude of benefits, yet none are proposed in Table LVGR-AP-4. The description of these improvements in the plan should mention that such structures increase underground water storage, prolong stream flows, and can expand meadow areas by drowning encroaching sagebrush.

Page 410 - Escape ramps should be installed in all water troughs, as stated on page 374 of the plan, rather than being an option as implied in the section on this page.

126 Page 655, Oil and Gas Appendix - We are concerned that the projections for future oil and gas drilling activity in the planning area may be inaccurate and consistently underestimate the rate at which drilling activity will increase. As we understand, the projected rate of increase of four wells every seven and a half years was determined by drawing a straight line through the most reasonable data points for the past 30 years (1953 through 1983)*, excluding the boom years of 1975-1982. An infinite number of straight lines can be drawn through these data points, with vastly different rates of increase. If linear growth is expected, we suggest the best fit

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126 linear regression through the data points be used to project future drilling rates, as such a line is defensible and can be replicated.

Using the data presented in Figure OAG-AP-1 on page 456, the slope for the regression line for 1953-85 (excluding 1975-82) is 1.55. This represents a growth in the drilling rate of about 3 wells every two years, and is about three times greater than the rate calculated with the BLM's drawn line. This calculated rate of growth has been consistent over the long run, 1.48 wells increase per year, and the rate for an added twenty years back (1933-85, excluding 1975-82) is quite similar. Using this defensible growth rate, the projected number of new wells in 1991 would be 95, considerably higher than the BLM's prediction of 64 wells. Using this method clearly shows estimates expected surface disturbance, habitat loss, and loss of AUMs used in this document are much too low.

127 Page 657, Competitive Leasing-Known Geologic Structures - Here the plan states that "the land inside a KGS is likely to be developed if it has not already been developed". Judging by the state of the KGS in the west portion of the Divide SA (Map 26), estimates of acreages of surface disturbance due to oil and gas activity used by the BLM in this document underestimate the magnitude of the losses.

128 Page 663, Drainage Provisions - It is unfortunate that increased surface disturbance and habitat loss are occur as a result of the federal drainage program, rather than a bona fide tool for oil and gas. Justification for this program and alternatives should be presented as a part of this DEIS.

129 Page 664, Soil, Water, and Air Appendix, Watersheds - The BLM proposal to inventory and reclaim unreclaimed disturbances and erosive roads and trails in critical watersheds is praiseworthy. However, this activity should be conducted on all BLM lands, with critical watersheds being a high priority. Statements presented here are actually policy, not a plan. In order to actually be a plan, objectives for how many acres or miles of roads will be reclaimed by a certain time frame should be included.

130 Page 665, Erosion Control Practices - Listed erosion [illegible] practices fail to include those available to reduce the livestock contribution to erosion and poor water quality. Examples include salt distribution away from water courses, riparian fencing, and development of alternate water sources.

131 Page 671, Standard Protection Requirements Appendix Wildlife Stipulation - As mentioned when we reviewed the Laramie RMP, statewide standard wildlife

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131 stipulations do not afford the same protection to bighorn sheep lambing areas they do elk calving areas. This omission should be rectified. Until that time, given the number of yearling bighorn sheep herds on T. lands in this planning area, such protection should be adopted in this RMP.

Page 675, Management Actions for Livestock Grazing - Paternalistic prophets mentality documented in "The Sod Dwellers" by Dick and Oakley (1972) was not limited to woven-wire fences, although this fence type had the higher mortality rate. Significant losses were also found on barbed wire fences. We have also documented significant losses east of Laramie on 38" barbed wire fences with 16" bottom clearance, when storms drift the bottom wire to the shot.

132 Page 676, Management Actions for Minerals Leasable Minerals-Coal - Habitat losses in mined areas and site facilities are not the short term as stated in this section. The BMP defined short term as being five years or less for its analyses. Most mined areas will not be restored to wildlife habitat in five years, and facilities last at least until the end of mining.

133 Page 677, Management Actions for Minerals - As described in this section of the BMP, oil and gas exploration and mining are other detrimental to wildlife and their associated habitat. Because of the possibilities for catastrophic habitat and wildlife losses from these activities, we recommend mineral withdrawals for all areas of multiple species crucial habitat concern and all WSA's and newly managed habitat units.

134 Page 680, Big Game - The potential for impacts of oil and gas activities on bighorn sheep and elk has been recognized here, but it should be pointed out that disturbance and displacement of females with young could significantly reduce survival of the young each year. Consequential perturbation areas are not documented. Not all crucial habitats for wildlife have been identified. In addition, environmental conditions can lead to changes in the size, shape, and even location of crucial habitats.

135 Page 683, Wildlife Habitat Improvements - The document does not provide information on types of habitat improvement, locations of the improvements, or the need for the improvements. The list of improvement actions is prepared by BMP staff. There is no prioritization of projects or schedule for implementation. Many projects are baseline data collection efforts and not habitat improvement. The proposals all appear to have merit, but more information is needed on how proposed range improvement projects and timber sales in interface with proposed range improvement projects and timber sales in

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135 needed if this RMP is to be considered a multiple use plan developed through integrated resource management.

MEDICINE BOW WILDERNESS SUPPLEMENT

Page 30, Encampment River Canyon VRA Livestock Grazing - The document indicates cattle compete with mule deer, elk, and bighorn sheep for forage, but "it is unclear how this competition has affected the overall availability of forage". It really is quite simple, in this case, there is little left for wintering wildlife.

136 The VRA is made up of 3 permittees grazing essentially one common pasture, and livestock use is excessive. Since very little of the allotment is routinely livestock grazed, the VRA appears to be over-valuated. There is also poor livestock distribution. The area has a history of trespass cattle and violations of the grazing permits (one sheep and one outside the permitted grazing dates). Forage is heavily utilized by cattle during summer when big game numbers in the area are very low. By the time big game concentrate on the winter range, much of the forage has already been consumed by livestock.

137 Encampment River Central VRA - The BLM does not propose to designate this area as Wilderness. Intensive management would maximize protection and enhancement of recreational, wildlife, fisheries, and scenic values. We believe that area needs protection different than areas of financial or commercial concern. As an important wildlife area, this area is crucial winter range for moose, deer, elk and mule deer. The highest density of elk in Wyoming is in the VRA. The area should be withdrawn from mineral entry and grazing should be controlled, at least temporarily, to allow the winter range to recover from past grazing abuses. The area is severely by an OHV plan during winter to reduce harassment and stress on big game populations.

If the BLM is truly interested in giving this area crucial management consideration and designating it as an ACEC, then perhaps the non-wilderness designation is appropriate. Non-wilderness designations would allow greater management flexibility, but protection of crucial habitat would not be assured. If the BLM intends to continue to manage the area to maintain the status quo, wilderness designation is the only way to protect this crucial big game habitat.

Ferguson Mountain VRA - We concur with the BLM that the VRA should be designated as a Wilderness area. Earlier in this case, we proposed this

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area be designated as an ACEC. Wilderness status would assure this area of crucial wildlife habitat is protected. This area would be an excellent addition to the Platte River Wilderness area administered by the U.S. Forest Service.

138 Sweetwater Mountain VRA - We concur with the BLM that the VRA should not be a wilderness area. The BLM proposes to manage the area for dispersed recreation. Livestock grazing problems, associated with poor distribution due to rugged terrain and overuse associated with water sources, and the narrow strips of riparian habitat along streams, should be corrected. The BLM should evaluate public access on the north side of Sweetwater Canyon to assure Sunrise Reservoir and the large block of public land formed by the mountain range and foothills adjacent to the reservoir. This area could receive a substantial amount of public use for hunting, fishing, and boating recreation if it was readily accessible to the public.

GENERAL COMMENTS

Organization of proposed and alternate management actions into the four alternatives, makes it difficult to recommend one alternative as best for wildlife. Because of the preference given to oil and gas and the large acreages of public land identified for leasing, alternatives C or possibly D are obviously desirable to maximize the ACECs and HMPs. The alternative G was obviously desirable to maximize the ACECs and HMPs. The alternative G has obviously desirable to maximize the ACECs and HMPs. The alternative G has obviously desirable to maximize the ACECs and HMPs. The alternative G has

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Lands Program

145 Utility/Transportation Sevices - BLM recommends abandoning the concept of transportation corridors and simply planning new facilities as close as possible to existing facilities. This might allow expecting past mistakes. The BLM should adhere to the corridor concept with flexibility to expand or redefine corridors to meet unexpected needs.

Landowner Adjustments - Most lands identified for disposal in the preferred alternative are in MCFO District 5. Those in MCFO District 6 are mostly available for future needs of local communities. Since some crucial habitats are included (mainly pronghorn crucial winter range), exchanges will have to be made on such individual cases. A general principle of maintaining current BLM acreage needs to be set, with land disposals by exchange whenever possible.

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147 Access - Given its recreational potential and national importance, acquiring access for the Continental divide Trail should be a high or moderate priority rather than a low priority.

Withdrawals - We support the recommendation to continue mineral and agricultural withdrawals for USGS lands around Semione, Tarter and Pathfinder Reservoirs and the Miracle Mile (which includes the Morgan Creek Unit) as well as land withdrawals for National Wildlife Refuges.

The BLM proposes to reclassify, but maintain mineral withdrawals for, several recreation sites including Teton Reservoir, Dupuyr, and Wimmitie sites. We can support the change in classification since it will ensure continuation of recreation sites important to fishermen and boaters, but the acreages should not be reduced. Recreational quality of these areas would be diminished with adjacent mineral development, and recreational use would decline.

148 The BLM proposes to eliminate mineral withdrawals for Miller Hill Lake, Antelope Reservoir, Flowing Well Lunan Road, and an unnamed but unidentified well sites miles west of Ravilne. These withdrawals should be maintained. Miller Hill Lake provides some recreation now and would have greater recreation value if access could be improved. Flowing Well Lunan Road is an important and productive water source in the Red Desert. The flows support crucial habitat and wetlands and the site has received special management to improve wetlands and waterfowl produc-

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148 tion. The other two sites are not identified and therefore cannot be evaluated. Withdrawals should be maintained until the BLM identifies the sites and the reasons the withdrawals are no longer needed.

149 The BLM proposes to eliminate all current public water reserve withdrawals, which preclude mineral and agricultural entry. While some of these reserves may not contain valid water sources, most do, and the importance of maintaining source water supplies for many multiple uses requires that these withdrawals be maintained. An acceptable objective that should have been proposed in the DMP is to review all current public water reserve withdrawals and retain those which contain useful water sources. If inventories show no water source is available, the withdrawal could be extended without impacting other resources.

150 Wildlife increments would be better served if CMAS withdrawals were maintained on all 3,641,500 acres, removing the options of disposal or agricultural entry which would favor livestock grazing. Under the no alternative A and B), Alternative C and the preferred Alternative D would remove this withdrawal on all but 3,916 acres. The DMP should have included an alternative to inventory and evaluate these multiple use withdrawals on smaller units. As it is, there is no wildlife information available in the alternative (see Figure LAM-AP-1, page 343).

151 Livestock Grazing - Projected effects of the three livestock grazing alternatives (other than existing management) are largely dependent upon the percentage of increased available forage from range improvements that is to be allocated to livestock (102 in E, 85% in C, and 80% in D). Depending upon the site and type of range improvement, it is possible that wildlife may have an demand for increased forage, and that there would get 100 percent. In other sites and cases, wildlife may take more than 20 percent of the increased production. Since wildlife, especially ungulates and game in these circumstances, is not generally understocked, there are limitations to how much control could be exerted to maintain 20 percent use. Rather than using the three percentages, the BLM should have evaluated alternatives where range improvements are designed solely for livestock use and alternatives where improvements are designed to accommodate multiple resource uses.

152 Two other valid alternatives for livestock management should have been evaluated. One is to set initial stocking rates according to current production shown in Table LVSR-AP-1 and then initiate monitoring studies

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152 to determine what other changes are needed or allowed. The other alternative is to set initial stocking rates according to levels provided by a forage allocation process that would consider competing uses.

Minerals

Coal - The BLM recommends all four coal tracts in WCFO District 6 (Indian Springs, North Indian Springs, Wild Horse Draw, and Atlantic Rim tracts) be made available for leasing. We can agree with the first three, provided the leases include stipulations for protection of high priority habitats and reclamation to topography and vegetation valuable for wintering big game and sage grouse. Given the probability of failure of reclamation of high priority habitat types on Atlantic Rim, especially Elk's rich wildlife values, and the recommendation by the owner of interspersed private coal to defer the tract lands on March 15, 1987), leasing of this coal tract should be deferred.

153 Oil and Gas - The preferred alternative is application of standard protection stipulations on all new leases, even on NSOs. This is better than Alternative D, where oil and gas interests would be considered in NSOs, but it will not meet the stated objective of protecting other resource values. Just as there are cases where drilling cannot be completed in time frames available in seasonal stipulations, there are cases where wildlife values are not protected with simple seasonal constraints or the available no-surface-occupancy stipulations (i.e. raptor nest sites). Mitigation measures proposed in Alternative B are preferred. This would also increase protection of high priority habitats along ephemeral and intermittent streams.

154 Locatable Minerals - Comments made on mineral withdrawals apply here. A middle ground alternative where current withdrawals are evaluated, including both mineral values and other resource values, should be included as a viable management option for this planning area.

Recreation - We support plans for special management of the North Platte River and Continental Divide National Scenic Trail as both can improve consumptive and nonconsumptive wildlife related recreation. Priorities for access acquisition are generally acceptable, however the Continental Divide Trail should be high or moderate priority, not low priority. Areas proposed for land consolidation or their priorities are also acceptable. The DMP should include provisions for taking advantage of any unexpected oppor-

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155 tunities that may arise for consolidating public lands, especially in the checkerboard.

156 Opening the Dunx Pond area to OHV use appears to be a practical decision considering its location, popularity, and current land ownership. However, this has a high potential of disturbing mule deer from immediately adjacent crucial winter range. Eighteen steep (still winter range in late then) a mile away, and these animals may also be disturbed. Continued wind erosion of the dunes will eventually cover deer crucial winter range, riparian habitats, and possibly a county road. If OHV use in this area is to be encouraged, or at least not discouraged, the proposed land consolidation management plan which will incorporate state lands should be developed to limit impacts to the dunes and associated habitats.

Soils, Water and Air - We support the priorities proposed for addressing watershed erosion problems. Muddy Creek and Sage Creek should be high priorities.

Wild (feral) Horses - Population objectives for feral horse management areas reviewed in this DMP appear to be reasonable. We agree with continued removal of feral horses from checkerboard lands, particularly Atlantic Rim and the Chain Lakes Wildlife Habitat Unit.

Wildlife

157 WMPs - The plan proposes to maintain existing WMPs and continue the development of four new WMPs, along with a cooperative management agreement for the Twin Ponds. These are actions which we support. Unfortunately, these DMP areas do not include a triangular section of checkerboard lands immediately north of Interstate 80 near Rawlins. This five-mile block area includes crucial winter range for mule deer and pronghorn, as well as important late-winter migration areas. It provides raptor nesting habitat, and there is a high potential for developed fisheries in several ponds and a lake near Rawlins. To provide for fisheries in several ponds and a lake near Rawlins. To provide for fisheries habitat improvements in this area, this parcel should either be incorporated into an existing DMP (such as Sage Creek), or a separate DMP should be developed for this area.

158 Since the BLM's preferred alternative is to develop and implement plans for six to WMPs and cooperative management areas, as is Alternative C, areas affected by management actions in the preferred Alternative D as

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158 listed in Table 1 (pages 67-68) should be the same as those for Alternative C.

Management to improve riparian habitats is supported. The proposal to consolidate public lands to obtain important wildlife habitats would be a positive action for wildlife.

SUMMARY

The draft RMP and DEIS for the Medicine Bow/Divide Resource Areas are inadequate and do not address habitat needs of resident wildlife populations. Extensive revisions are needed to improve this document so it represents a balanced, multiple use resource management plan. The plan is oriented toward commodity production. Wildlife habitat management is not a primary goal of this plan. The RMP is not an integrated resource management plan. Each resource program appears to have developed its own desired level of outputs without coordination or integration with other programs. Wildlife and fisheries outputs are secondary to livestock grazing, oil and gas development, mineral development, and timber production, even though the economic value of recreation is much greater than several of these other uses.

We have provided extensive recommendations, documentation, and analysis to support numerous changes that we feel should be made in this proposed plan in order to protect wildlife values. The Plan's inadequacies required an exceptionally large investment of time and effort on the part of WGFD personnel. As currently written, the plan is unacceptable. This RMP will direct management of an extremely large part of Wyoming for a long time. It is too important to let stand in its current form.

Sincerely,

Francis Petera

FRANCIS PETERA
ASSISTANT DIRECTOR
OPERATIONS

FP:DNE:sb
Attachments
cc: Game Div.
Fish Div.

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In addition to the pages of the letter reproduced in this document, the Wyoming Game and Fish Department sent the following information to the BLM. To save space, these items (which do not contain comments requiring a response) have not been reproduced. The complete WGFD letter, with all attachments, is on file at the Great Divide Resource Area office.

Appendix 1: "Percent BLM Land and Average Annual Benefit to Wyoming for Big Game Herd Units in the Medicine Bow/Divide Resource Management Area"

Appendix 2: Map showing overlapping sensitive wildlife habitats.

Appendix 3: "32 Priority Management Areas Which Contain Crucial Multiple Species Overlaps Within the Medicine Bow/Divide Resource Area"

Appendix 4: "Medicine Bow Divide Resource Area RMP and DEIS Grazing Allotment Review: Summary of Allotments with Crucial Habitat Resource Conflicts, and Recommended Changes in Allotment Categorization"

Appendix 5: "Medicine Bow-Divide Resource Area RMP and DEIS Grazing Allotment Review: Summary of Allotments with Multiple Species Overlap of Crucial Habitat. This summary includes recommended allotment category changes and known resource conflicts."

Appendix 6: "Medicine Bow-Divide Resource Area RMP and DEIS Grazing Allotment Review: Proposed Range Improvements Under the Preferred Alternative (D) and Potential Conflicts with Wildlife"

Appendix 7: "Areas affected by the BLM's Timber Management Plan for the Fringe Area Around the Medicine Bow National Forest"

Appendix 8: "Revised Wyoming Big Game Herd Unit Population Objectives"

Copy of a two-page WGFD memo from Dave Moody to Harry Harju about a meeting on March 10, 1987, concerning potential mine plans in the Atlanti Rim area and associated mitigative measures based on the plans submitted

Two pages identifying WGFD management objectives for 1990 for pronghorn in the Sitter Creek Herd Unit (A 414)

Two pages identifying WGFD management objectives for 1990 for mule deer in the Baggs Herd Unit (HD 437)

Responses to Letter 103

1. The BLM's "Fish and Wildlife 2000: A Plan for the Future" is a part of the policy tier of BLM's planning system, which is described in general response 2. The Medicine Bow-Divide RMP and all subsequent wildlife management plans and actions must be consistent with that plan.

2. Please see general response 5.

3. The revised WGFD strategic plan for big game had not been completed when the draft RMP/EIS went to print. Therefore, the population objectives included in the draft were outdated by the time it was distributed for public comment. The revised population targets and management objectives have been included in the proposed RMP in this document.

   As we stated in the draft RMP/EIS, one of our objectives for wildlife habitat is to provide adequate habitat quality (food, cover, space, and water) to support mutually agreed upon population levels established in the WGFD strategic plan. That objective has been carried forward into the proposed plan in this document.

4. The management direction presented in the proposed plan is based on activity plans in existence where those plans are consistent with management objectives for the plan. Some activity plans may need revision to be consistent with the management direction established in the RMP. New activity plans will be necessary to implement some RMP decisions. Activity plans are available for public review and will be developed or modified with appropriate public involvement. In some cases, this public involvement will include news releases and public meetings.

   We will keep the WGFD informed of all AMPs, FMPs, and HMPs to be developed or modified and will ask for your agency's input. We also will continue to do this for numerous site-specific projects such as timber sales and fencing projects as in the past.

5. The BLM currently has procedures in effect that allow for modification of existing fences on public land. Any fences that are not in conformance with management direction and that present an unacceptable impediment to accomplishing identified resource management objectives would be considered individually for modification. Where problems have been identified and the proposed modification conforms with existing management direction, the fence would be modified following consultation with all affected parties, including WGFD and grazing permittees. All proposed modifications must comply with existing standards or approved exceptions.

6. Thank you for bringing this information to our attention.

7. Thank you for bringing this information to our attention. A full fire suppression designation does not preclude the use of prescribed fire for purposes such as improving crucial wildlife habitats. The intent is to help prevent a loss of habitat value as a result of a wildfire. Please refer to the Fire Management appendix in the draft EIS. Prescribed fire can be used to improve wildlife habitat where appropriate, regardless of the fire management designation.

8. The proposed plan in chapter 2 of this document contains a discussion of management direction and intent for all areas that were considered for ACEC designation and the rationales for the proposals as to which areas would be designated ACECs. In addition to the areas proposed for ACEC designation in the preferred alternative of the draft RMP/EIS, the proposed RMP recommends ACEC designation for the Jep Canyon area, which encompasses the north end of the Baggs elk crucial winter range.

The overlapping big game crucial ranges do not meet the identification criteria of relevance and importance necessary for ACEC consideration. However, under the proposed RMP, habitat quality in overlapping big game crucial ranges would be maintained by intensive management of surface-disturbing activities. The BLM would consult with the WGFD concerning proposals involving surface disturbance in these areas. Please see the Wildlife section of the proposed plan, chapter 2, for more detail.

9. The revised maps were not available when the draft RMP/EIS went to print, but this information has been updated in this document.

10. Please see the response to comment 8 of this letter. The areas where several crucial habitats overlap do not meet the identification criteria of relevance and importance necessary for ACEC consideration. Standard management practices to be carried out under the proposed RMP would ensure maintenance and improvement of high priority standard wildlife habitat types and compliance with mandates of the Endangered Species Act.

    Mineral withdrawals are placed on areas with important values that cannot be adequately protected by other means. Our authority to manage surface disturbance associated with mineral exploration and development is sufficient to maintain habitat quality in the overlap areas without withdrawing them from mineral activities.

11. In the proposed plan, the north end of the Baggs elk crucial winter range is proposed for inclusion in the proposed Jep Canyon ACEC. This includes the Atlantic Rim area. Under the proposed RMP, the Northeast Cow Creek area would not be considered further for coal leasing.

    After the draft RMP/EIS went to print, we held coordination meetings with WGFD, Wyoming Wildlife Federation, National Wildlife Federation, and Union Pacific Resources concerning potential coal development areas, primarily Atlantic Rim. The committed mitigations agreed upon at those meetings are included in the Coal appendix to this final RMP/EIS.

12. We recognize that the bald eagle breeding and wintering habitat identified on the maps provided with your comments is very important. The BLM and the USFWS conducted a biological assessment for this RMP under section 7 of the Endangered Species Act. The result of that consultation was a finding of no effect, as letter 173 in this document indicates.

    The endangered status of the bald eagle ensures that nesting and roosting habitat will be "red-flagged." Any future action that could possibly affect threatened and endangered species habitat will be analyzed in a site-specific biological assessment in consultation with the USFWS. This applies both to BLM-initiated actions identified in activity planning and to actions requested by other parties. If a "may effect" determination is reached, mitigative measures adequate to protect the habitat would be developed or the proposal would be rejected.

13. The objective is written for management of resources, including, but not limited to, raptors within defined geographic areas. The objective addresses other resources in addition to raptor habitat. A part of the objective is to maintain the productivity of nesting raptor pairs.

14. The well to which you refer has not been fully abandoned, so there has been no effort to reclaim the site. Other wells in the same area and in other areas with similar soils have been successfully reclaimed.

15. The ten-year allowable harvest level under the proposed RMP would be 20 MMBF, which is a 60% increase from the present established level. Reference to the accelerated harvest rate of 16.5 MMBF for the first five years has been dropped from the proposed plan. Please keep in mind that the actual level of harvest can vary from year to year within a ten-year period in response to insect activity. Timber is not always cut in the year that it is sold; it may be sold within one five-year period, but the actual harvest might be spread over several more years.

    Our annual, five-year, and ten-year timber sale plans identify the locations of our future sales. This information was not included in the proposed plan because the specifics of future sales often change because of new situations or conditions. Updated sale plans are distributed annually at BLM-WGFD coordination meetings. Our most recent ten-year timber sale plan was distributed at the meeting of April 15, 1987. That particular plan incorporated the preferred alternative of the draft RMP/EIS. These plans, which are available to the public upon request, identify the locations, sizes, harvesting methods, and road construction needs for each sale. We also solicit WGFD input into the site-specific environmental assessments for each timber sale. Also please see general response 2.

16. Additional analysis of anticipated impacts on wildlife has been included in this final document.

17. We recognize your concern over additional logging on Shirley Mountain. During the preparation of EAs for any future timber sales greater than 250 MBF, we will analyze cover/forage ratios and road densities. Each EA will contain descriptions of the cumulative impacts associated with the past harvesting activity.

    The Shirley Mountains forest management plan will be updated soon, and the WGFD will be invited to participate in the revision of this activity plan.

18. The opportunity exists to improve bighorn sheep habitat in the areas you mention through prescribed burning or silvicultural treatments. Site-specific opportunities to improve the habitat will be addressed during activity planning in forest management plans and/or habitat management plans. Currently, there is no timber industry interest in these areas. However, whenever interest in the area increases, we will coordinate with WGFD in designing timber cuts to improve bighorn sheep habitat.

19. The proposed plan in chapter 2 of this document indicates that all public lands would be open to utility/transportation systems however, it also says that specific areas identified on map 14 would be avoided. These areas include riparian areas, high priority habitat, and sage grouse strutting grounds. The proposed plan further states that the Wyoming BLM standard mitigation guidelines for surface-disturbing activities would be applied to activities related to utility/transportation systems to protect important resource values.

    Each utility/transportation project that might be proposed would be evaluated through environmental analysis that would identify impacts on wildlife habitat and appropriate mitigating measures.

20. Please see general response 9.

21. Acquiring legal access typically involves obtaining an easement across private lands to public lands. Future opportunities to acquire such easements are unpredictable. The need for public access and the owners of private lands may change over time. Throughout the planning area, there are hundreds of landowners with lands adjacent to public lands. In the proposed plan, we have identified priority areas where access opportunities will be pursued. The BLM is committed to acquiring and preserving access to public lands where practical.

22. Please see the responses to comments 8 and 10 of this letter.

23. No additional areas are proposed for exclusion of livestock grazing in the proposed plan, although several are identified for special attention for maintenance of wild-

life habitat. An objective of the proposed plan is to maintain habitat quality in overlapping big game crucial ranges. If livestock grazing should be found to be contributing to unacceptable impacts on habitat in these areas, changes in grazing management would be considered. The BLM would consult with the WGFD concerning these types of conflicts.

24. The objective statement has been revised for the proposed plan in chapter 2 of this document. The word "wildlife" was inadvertently left out in the draft RMP/EIS. Also please see general responses 4 and 6.

25. The area along highway 789 to which you refer is outside the Medicine Bow grazing EIS area. Livestock grazing management in that area was addressed in the Divide Grazing EIS (USDI, BLM 1983a, 1983b). It lies within an "I" category allotment in which actions will be taken to address management problems. Monitoring data are being collected on the area. Also please see general responses 4 and 6.

26. Please see general response 7. We will work with WGFD personnel to identifying riparian areas where management actions are needed.

27. Please see general responses 4 and 6.

28. Please see general response 2. We agree that range improvement projects have the potential to enhance both wildlife habitat and grazing.

29. The committed mitigations that were agreed upon are included in the Coal appendix to this final document. Also please see the response to comment 11 of this letter.

30. Please see general response 2. The Sierra Madre oil and gas proposal is a site-specific issue and is not appropriate for analysis at the RMP planning tier. An environmental assessment on the proposal was completed in the spring of 1987. The BLM and the USFWS conducted a biological assessment for the proposal under section 7 of the Endangered Species Act. The biological opinion of the USFWS was that the proposal would not jeopardize the continued existence of the bald eagle and that there would be no effect on peregrine falcons and black-footed ferrets. The biological opinion included five conservation recommendations with which BLM agrees. A copy of that assessment and the USFWS response is available on request.

31. The recreation areas to which you refer are relatively small sites of high public value. In some, there has been a substantial investment of public funds, and locatable mineral development could easily degrade public values. In larger areas, such as overlapping big game crucial ranges, our authority to manage surface disturbance associated with mineral exploration and development is sufficient to maintain habitat quality. Also please see the response to comment 10 of this letter.

32. The proposed RMP identifies only the general location of each of these proposed sites. The exact locations are yet to be determined. As site plans are developed, the effects of the developments on specific wildlife resources will be assessed. We will coordinate with the WGFD in developing these site plans.

    Since the draft RMP/EIS was published, we have completed a recreation project for the Jelm Mountain site. In preparing that plan, we analyzed recreation needs and determined that a campground is not warranted. Instead, the Jelm Mountain site would be developed for day use only. We consulted with the WGFD on the project plan.

    Please note that the Battle Mountain site is not included in the proposed plan in chapter 2 of this document. Field examination revealed that there are no suitable sites for a campground on BLM-administered public land in that area.

33. The wildlife habitat and fisheries management objectives have been rewritten for this final document. THe new objectives appear in the "Proposed Plan" section of chapter 2, under "Wildlife Habitat and Fisheries Management."

34. Habitat management plans will address site-specific prescriptions, actions, and priorities. Also please seen general response 2.

35. Please see general response 7.

36. Please see general response 9. The proposed RMP identifies the need to consider consolidating public land to obtain important wildlife habitat areas such as (a) perennial streams, lakes, and wetlands (USFWS also has identified this as a priority); (b) raptor concentration areas; (c) crucial winter range for bighorn sheep, elk, mule deer, or antelope; and (d) other high priority habitats. We will consult with the WGFD on any disposal or consolidation actions.

37. The purpose of the fire suppression designation "full suppression with management options" is not to allow improvement of certain areas through fire management; rather, it is to restrict the use of certain equipment that could adversely affect the area. The fire suppression designations are explained more fully in the Fire Management appendix, page 325 in the draft RMP/EIS. Also please see the response to comment 7 of this letter.

38. The map showing sage grouse leks has been revised. It appears as map 47 in chapter 3 of this document.

39. Please see general response 9.

40. Thank you for bringing this information to our attention.

41. The Medicine Bow Forest Plan does not include consideration of recent increases in the production level of the Louisiana-Pacific Corporation mill in Saratoga. Our estimate that the demand level for sawtimber in the planning area is 30 to 40 MMBF, which was based on professional judgment, does include consideration of this increased mill capacity. All timber sales advertised in the planning area in the past ten years have been sold. This, along with our professional estimate of demand, indicates that there is a need for timber from BLM-administered public land in the planning area. Of course, demand will vary over time.

42. Please see the response to comment 32 of this letter.

43. The statement did not say, nor was it meant to imply, that all species of wildlife use grass. Rather than name individual species, the writer used "wildlife" in the broadest sense: "living things neither human nor domesticated." The reference to spring probably was too narrow; thank you for bringing this error to our attention.

44. As in the section discussed in comment 43, "wildlife" was used in its broadest sense. Possibly some species should have been named for greater precision. Thank you for bringing this problem to our attention.

45. Thank you for this additional information.

46. As table 17 on page 173 in the draft RMP/EIS shows, the vegetation type identified as "barren" is associated with three wildlife habitat types: limber pine woodland, mountain mahogany, and badland. One should not infer from the name that all of the "barren" vegetative type is completely without vegetation.

47. We recognize that inventory, monitoring, and evaluation are essential management functions that the BLM needs to carry out to meet its long-term commitments in the management of public rangelands. It is the continuing policy of the BLM to conduct baseline rangeland inventories, assigning priority to areas with the greatest need. The timing and intensity of each inventory will be determined during activity planning on the basis of resource conditions and management needs.

48. Please see general response 7.

49. There are more than 374 vertebrate species in the planning area. Discussing all of them directly would be virtually impossible, as well as inappropriate at the RMP tier of our planning process (see general response 2). Many species were not discussed because of inadequate data, lack of information necessary to predict impacts or significance of impacts, or lack of public interest. Effects on species that were directly addressed should give some indication of the effects on other species.

    Effects on important standard habitat types were discussed. Included in the standard habitat types are the riparian complexes and shrub types you mention. High priority standard habitat types support a much greater diversity of species than do those with low priority; therefore, species not addressed directly would be affected most by effects on high priority habitat types. Effects on the standard habitat types should imply effects on wildlife species that rely on them.

50. Most of your suggestions have been incorporated into the revised table (table 7 in this final document). However, because of the low number of sightings of bald eagles in that area, we do not agree that the bald eagle should be a high priority species for management on the Laramie Peak Big Game winter range. It would be more appropriate to consider it a high priority species in the Laramie Peak HMP area.

51. The changes you suggest have been made in this final document.

52. The statement you cite is intended as a generality to help describe the relative values of the standard habitat types. It should not be interpreted to mean that the low priority standard habitat types will be categorically assigned to heavier use. Obviously, where these types compose portions of crucial winter ranges (because of exposure, slope, and aspect) they have a very high value to wildlife in that they provide forage and cover during winter periods.

53. Thank you for calling this oversight to our attention. A section about moose has been added to chapter 3 in this proposed RMP/final EIS, and map 43 in that chapter shows the herd area boundaries.

54. The standard habitat types were developed to enable us to approach management of wildlife habitat by ecosystem. This approach emphasizes the maintenance or modification of animal species richness in an area by manipulation of habitat availability and through the juxtaposition of habitat types. This approach can complement (but will not replace) the more traditional "management by featured species," in which the life cycle requirements of animal species of high federal or state interest are considered in land management decisions.

    Data used in the development of the standard habitat types indicated that 61% of the breeding birds, mammals, reptiles, and amphibians in the resource area are found on only 6% of the public lands, in the first ten high priority standard habitat types listed on table 4. In other words, these ten standard habitat types support the greatest species diversity.

    We realize the importance of crucial winter ranges for big game species and will protect habitat quality in those areas.

55. Thank you for the information. Table 23 has been revised and appears as table 4 in chapter 2 of this document. The footnote you mentioned has been eliminated in the updated table.

56. Map 47 of the draft RMP/EIS has been revised for this document. It appears as map 42 in chapter 3.

57. Thank you for the information. Map 48 of the draft RMP/EIS has been revised for this document. It appears as map 44 in chapter 3.

58. Thank you for pointing out this error. The title should have been "Crucial Elk Habitat."

59. Thank you for the additional information. Map 54 has been revised and appears as map 46 in chapter 3 of this proposed RMP/final EIS.

60. Thank you for the updated information. The corrections have been included in the revised map, which appears as map 45 in chapter 3 of this document.

61. Table 24 has been revised and appears as table 10 in chapter 3 of this document. The heading of column 4 has been changed to read "Acreage of *Crucial* Habitat in Planning Area," and acreages and objectives have been updated.

62. Thank you for the additional information. As mentioned in the previous response, the table has been revised. The new information you provided has been used in the revision (now table 10).

63. Thank you for this information. It, too, has been included in the revised table (table 10).

64. Thank you for the update on crucial winter ranges for antelope and bighorn sheep. This information has been incorporated into the revision of table 25, which appears as table 11 in chapter 3 of this document.

    Further discussions with the local WGFD biologists have revealed that a total of 15 sage grouse leks have been documented on public land in the Ferris-Seminoe HMP area. The two recently discovered leks in the Red Desert HMP area have been added to table 11 in this document.

65. The 40%:60% cover to forage ratio is applied to evaluation areas of of 3,000 acres for small sales and up to 5,000 acres for large ones. The 40:60 cover to forage ratio is an optimum that may not be attainable in every case. The ratio is tailored to fit individual situations. Additional analysis concerning timber harvest and cover to forage ratios is included in this final document.

    In areas of the forest fringe where fingers of timber meet nontimbered lands, the cover to forage ratio is not used for evaluation. Because these areas can be very important hiding and thermal cover for animals using nontimbered areas, the BLM, in consultation with the WGFD, will evaluate the effects of timber harvest in such areas case by case.

66. The effects of timber harvesting are discussed under "Effects on Wildlife" in this document. Potential effects such as those you mentioned (including cumulative impacts) will be analyzed specifically in the EAs for individual timber sales.

67. The Encampment Bighorn Sheep HMP was developed in 1976 to facilitate the reintroduction of bighorn sheep. The existing HMP, which was prepared specifically to cover management of bighorn sheep habitat, eventually will be incorporated into the HMP for the Saratoga Valley HMP area. At that time the HMP will be expanded to include enhancement opportunities for elk, mule deer, and other wildlife species in the Encampment River Canyon as well as for those in the upper North Platte River Valley.

    Some confusion about the organization of the draft RMP/EIS is evident in several comments pertaining to various HMP areas. The wildlife section of chapter 3 begins on page 180; the "Big Game" subhead to that section appears on page 186. Under "Big Game," the section on elk begins on page 187. Because several pages of maps and tables follow the "Elk" subhead, it may not have been

evident to some readers that the "Elk" section continues on page 199, with further subheads indicating discussion of the different HMP areas. A complete outline of the big game portion of the wildlife and fisheries section would appear as follows:

Wildlife and Fisheries (180)
Wildlife (180)
Introduction (180)
Wildlife Habitat (183)
Big Game (186)
Elk (187)
Baggs HMP Area (199)
Ferris-Seminoe HMP Area (199)
Shirley Mountain HMP Area (200)
Encampment Bighorn Sheep HMP Area (200)
Saratoga Valley HMP Area (Proposed) (200)
Laramie Peak HMP Area (Proposed) (200)
Jelm Mountain HMP Area (Proposed) (201)
Wick Elk Winter Area (201)
Pennock Mountain Elk Winter Range (201)
Bighorn Sheep (201)
Deer (202)
Pronghorn Antelope (202)
Upland Game Birds(186) and so on.

As can be seen from this outline, separate subheads for other big game species follow the "Elk" section (beginning with "Bighorn Sheep" on page 201). However, those sections were not large enough to warrant further subdivisions by area discussed.

The additional information you provided in your comments 67 through 72 has been added to chapter 3 of this document, each in the section pertaining to the appropriate species.

68. Please see paragraphs 2, 3, 4 and 5 of the response to comment 67 of this letter.

69. Please see paragraphs 2, 3, 4 and 5 of the response to comment 67 of this letter regarding the organization of the draft RMP/EIS. The memorandum of understanding between the WGFD, the FS, and the BLM was finalized after the draft RMP/EIS went to print. Information about that agreement is included in the "Bighorn Sheep" section of chapter 3 of this proposed RMP/final EIS.

70. Please see paragraphs 2, 3, 4 and 5 of the response to comment 67 of this letter regarding the organization of the draft RMP/EIS.

71. Please see the response to comment 65 of this letter and paragraphs 2, 3, 4 and 5 of the response to comment 67 regarding the organization of the draft RMP/EIS.

We will pursue opportunities to enhance big game winter ranges and transition ranges through timber harvest where such opportunities exist.

72. Please see paragraphs 2, 3, 4 and 5 of the response to comment 67 of this letter regarding the organization of the draft RMP/EIS.

73. Thank you for pointing out this additional information.

74. Much of the additional information you provided has been incorporated into the "Pronghorn Antelope" section in chapter 3 of this document.

75. This information has been added to the "Sage Grouse" section in chapter 3 of this document.

76. Map 56 has been revised and appears in chapter 3 of this document as map 47.

77. Map 57 has been revised and appears in chapter 2 of this document as map 8.

78. A revised "Bald Eagle" section appears in chapter 3 of this proposed RMP/final EIS.

79. A revised "Mountain Lion" section appears in chapter 3 of this proposed RMP/final EIS.

80. The specific proposal to which you refer is preliminary, and the exchange may never occur. For this reason, analysis of the proposal as part of the proposed plan would be inappropriate. Also please see general responses 2 and 9.

81. The calculation of the long-term sustained yield capacity level (26 MMBF) included only the commercial forestlands that were inventoried from 1977 to 1981. This comprises about 26,175 acres of forestland, or about 25% of the entire forestland acreage in the planning area. Other resource needs were considered in this calculation, particularly the need for buffer zones in riparian areas.

In all alternatives that were considered in the draft RMP/EIS, 85,228 acres of forestland would have been managed to enhance other uses, and forest management would have been specifically tailored to benefit other identified resource values or uses. (Aspen and other noncommercial species are included in this category.)

82. The BLM measures the demand or interest in private acquisition of public lands by monitoring requests to purchase or exchange lands from private individuals. Projected needs also are discussed with municipal and county planning departments and state planning and development agencies. These indicators have been monitored for the past 14 years.

83. Please see the response to comment 11 of this letter. The assumption that reclamation would be accomplished 12 years after the end of mine life is a general assumption based on typical settings in this coal region. It was taken from the Green River-Hams Fork Round II Regional Coal EIS (USDI, BLM 1980a, 1980b).

84. It is and has been our objective to improve reclamation methods and results in the planning area. Reclamation is a dynamic process, and methods are changed as new data are evaluated. We have learned from the unsuccessful efforts as well as from the successful ones.

The estimate of three to five years to accomplish the stated degree of reclamation is based on our past experience. It is our best estimate. We realize that conditions vary greatly and that it takes more effort to reclaim some sites than others.

85. The Sage Creek Basin is a prime example of what is meant by the statement on page 223 of the draft RMP/EIS concerning watershed conditions of large tracts of mixed land ownership upstream. The Sage Creek basin is highly erodible by nature of its geology, and it would produce enough sediment with no livestock grazing on public lands to cause the same effect on fisheries. The clay sediment from the basin has electrically charged particles that do not settle out and therefore must be flushed through before the river will clear. Although silt from Sage Creek does affect the North Platte River, the problem is that the river becomes unfishable, not that it becomes unproductive. In fact, the North Platte River below Sage Creek is quite productive in terms of both aquatic insects and game fish.

86. Our experience (and that of others cited in the draft document) indicates that rest, change in season of use, or other major grazing management changes would have to be implemented for consequential fisheries benefits. A moderate change would be about a 20% change in the number of cattle; a minor change would be about 5% to 10%.

87. We agree that alter would have been a preferable term to describe the effect of pine beetle infestation.

88. Possibly *region* was a misleading word. In this case, it can be interpreted to be synonymous with the planning area.

We agree that a mine site is only one of several developments associated with coal mining that can affect wildlife habitat. The Wildlife appendix to the draft RMP/EIS contains a discussion of the effects of coal mining, including auxiliary facilities, access routes, and avoidance zones.

89. The Wild Horse Draw area has been dropped from further consideration for coal leasing. Mitigative measures to protect sage grouse in the China Butte area are included in the coal appendix to this document. The measures include provisions to prohibit surface disturbance in some areas, seasonal occupancy restrictions, and coordination with the WGFD in relocation of any lek that would be disturbed by a mine pit.

90. A revised section on the effects on raptors from coal mining appears in chapter 4 of this document under "Effects on Wildlife and Fisheries."

91. The paragraph to which you refer has been revised for chapter 4 of this document.

92. In the Coal appendix to this proposed RMP/final EIS, the section on multiple-use conflict evaluation contains a provision under "Wildlife Habitat" that requires that when crucial wildlife habitat is disturbed, reclamation will ensure replacement of that habitat "in kind."

93. Table 31 has been revised and appears in chapter 4 of this document as table 13. The acreage figures for crucial winter ranges for antelope and bighorn sheep and those for breeding/nesting habitat for sage grouse and sharp-tailed grouse were updated with information received from the WGFD during the comment period. A review of additional sage grouse information in your letter indicates that information is inconsistent with data we received for table 13. Apparently leks on land other than BLM-managed public land were included in the letter. Table 13 pertains only to leks and nesting habitat on public lands.

The information about newly discovered leks in the Ferris-Seminoe and Red Desert HMP areas has been included in this document.

94. The statement to which you refer says that "*most* of these withdrawals . . . do not include large amounts of crucial or important habitats . . ." (emphasis added). You are correct in saying that the Morgan Creek unit is important to mule deer and bighorn sheep; however, that unit is managed cooperatively by the BuRec and the WGFD, not by the BLM.

The approximate acreage of crucial winter habitat for mule deer and antelope has been revised in this proposed RMP/final EIS. Lambing habitat for bighorn sheep is found almost exclusively in the Morgan Creek unit.

95. Using additional information provided by local WGFD biologists, we have reviewed the estimated acreage of sage grouse breeding/nesting habitat that could be lost to uranium mining. The revised acreage figures appear in chapter 4 of this document under "Uranium" in the section describing the effects on wildlife from minerals actions.

96. Please see the response to comment 87 of this letter.

97. We have not made a determination of significance here; we have merely stated that available forage would be reduced by less than 1% of the active preference. As is stated on the same page of the draft RMP/EIS (page 246), some individual livestock operations could be directly affected by a management action for lands and minerals. The exact location and extent of future lands and minerals actions cannot be predicted. The actual loss of forage as a result of individual actions and the impact on livestock grazing and wildlife would be considered case by case.

98. You are correct in saying that closing Como Bluff to leasing should not be listed as a wildlife action.

The cost of increased mitigation efforts is correctly included as an effect on the availability of oil and gas resources. The effects of alternative management actions are analyzed in the RMP/EIS. In this case more intensive mitigation is required in some areas than under other alternatives. Requirements for intensive mitigation efforts vary among the alternatives.

99. Thank you for the clarification. The section to which you refer contains a discussion of a likely "scenario" of the effects that would have resulted if Alternative B had been selected as the proposed plan. If large expanses of timber in forest fringe habitats were killed by mountain pine beetles, deer and elk use of the areas would decrease. Use of the area by wildlife species dependent on earlier successional vegetation types would increase.

100. The information you sent has provided useful background for the rewritten sections of chapter 4 of this document on the effects on wildlife from livestock grazing management actions.

101. An assessment of effects on antelope in the North Indian Springs area has been included in chapter 4 of this final document. Although mule deer and elk also are found in the area, we have determined that effects on those species would be insignificant and do not warrant discussion.

102. Seeding is discussed under "Land Treatments" on page 375 in the Livestock Grazing appendix to the draft RMP/EIS. The use of native or introduced species or a combination would be determined for a particular land treatment during activity planning for that action.

103. Thank you for pointing out this inadvertent omission. The Baggs crucial winter range for elk was so identified in many locations in the draft document. We believe we have been more specific in all mentions of this area in this final document.

104. Please see paragraph 2 of the response to comment 98 of this letter.

105. Local densities, access, and hunting quality in the Indian Springs tracts should not be affected because there would not be a large amount of acreage affected at any one time.

We agree that development in the Atlantic Rim area could have indirect adverse effects on the northern segment of the Baggs elk herd and therefore indirect effects on hunting quality. This information is reflected in the discussion of the Atlantic Rim under the section on effects on wildlife from minerals actions in chapter 4 of this document.

106. The areas proposed for seeding are in the Sullivan and Chalk Hills/Dry Creek allotments. See table LVGR-AP-4 in the draft RMP/EIS for estimated acreages proposed for treatment in each allotment.

The area in the Sullivan allotment, which was identified during operator consultation, is south and west of the Shirley Basin highway. The condition class of the site is believed to be so low that other management techniques would not improve the condition.

The area proposed for treatment in the Chalk Hills/Dry Creek allotment is in Albany County, approximately 2 to 4 miles east of the petrified forest in Carbon County. Soils in the area are relatively poor, and the treatment would be done to reduce erosion. The exact locations and acreages, the methods of treatment, and the potential environmental effects of the treatments would be determined during activity planning for each site.

107. The intent of the statement in the "Soils, Water, and Air" section on page 272 of the draft RMP/EIS was to indicate that *if mining should take place* in the steep-sloped Jep Canyon, Snowshoe Canyon, and Hay Gulch, it would be unlikely that predisturbance vegetation could be replaced. We should have expressed this more clearly. In the section on wildlife (page 277), it was assumed that mining activity would not be allowed in those areas, so the projected success of reclamation was different.

In this final document, the section on effects on soils, water, and air in chapter 4 contains a sentence about protection of aspen patches in the major drainages. As is indicated in the revised coal appendix included in this document, such areas would be protected from disturbance by mining or related support facilities. This would protect the hydrologic integrity of the drainages in which the aspen patches occur, and it would reduce effects on the elk herd.

108. The committed mitigations described in the Coal appendix would provide an adequate migration corridor for elk to the north end of Atlantic Rim. Therefore, the effect would be minimal.

The discussion about displacement of elk to adjacent aspen stands has been modified in the section about Atlantic Rim in chapter 4 of this document, in the "Leasable Minerals—Coal" section of "Effects on Wildlife and Fisheries."

109. The areas involved are identified on maps 25, 26, and 27 in chapter 2 of this document. Under Alternative D in the draft RMP/EIS, exclusion of livestock grazing was proposed in 1,120 acres of the Baggot Rocks area. Under that alternative, AMPs would have been developed in the rest of the areas shown on the maps (12,020 acres). However, in the proposed plan (see chapter 2), all 13,140 acres are identified for special attention for maintenance of wildlife habitat. The primary objective for these AMPs would be to maintain and enhance crucial winter range for wildlife.

110. AMPs will be developed for allotments in the "I" category. Conflicts with wildlife habitat management objectives was a factor in placing many of these allotments into that category.

Under the proposed RMP, overlapping crucial winter ranges would be managed to maintain the habitat quality of the areas. If conflicts between livestock grazing and maintenance of habitat quality in the overlapping crucial winter ranges were discovered, actions would be taken to address the conflicts within funding and workforce limitations.

111. We will continue to coordinate with the WGFD on range treatments and timber cuts.

112. Please see general responses 4, 6, and 7.

113. Please see general responses 4, 6, and 7. We project that the additional forage produced on clearcuts would be allocated in the same manner as other additional forage. The figure has been corrected to 2,737 AUMs in this final document.

114. Please see general response 7.

115. Please see general response 5.

116. The map of raptor concentration areas has been revised. It appears as map 8 in chapter 2 of this document.

117. Please see the response to comment 116 of this letter.

118. A discussion of the rationale for proposed decision on ACECs appears in chapter 2 of this document under "The Proposed Plan" near the end of the section on areas considered for ACEC designation. The Seminoe and Shamrock Hills RCAs contain the highest past and present concentrations of nesting ferruginous hawks in the planning area. This species, a "category 2" candidate for threatened or endangered status, is very sensitive to human disturbance. Special attention to management of the habitat in these areas would greatly enhance the status of the species. (Category 1, 2, and 3 candidate species are defined in the Glossary of the draft RMP/EIS.)

119. The 100-foot buffer for riparian areas was established for the recalculation of the allowable harvest level. It will be used as a guideline in project design; the actual size may vary, depending on conditions. As is stated in the Forestry appendix to the draft RMP/EIS, the minimum size of the buffer zone would be 100 feet, and this could be increased if conditions warranted a larger buffer. Adjustments to buffer zone sizes are site specific and would be determined through environmental analysis for each timber sale.

120. Raptor habitat is identified during the environmental analysis for each timber sale. The BLM area wildlife biologist determines whether some part of the harvesting activity could affect raptor habitat, then makes a recommendation to the authorized officer (the area manager), who then makes a decision. This process also applies if new raptor nests are discovered during actual harvest activities. We will continue to involve the WGFD in the environmental analysis of proposed timber sales.

121. Management of overlapping crucial winter ranges was discussed in the responses to comment 8 and comment 110 of this letter. Conflicts with wildlife habitat management objectives were a factor in placing many of the "I" allotments into that category. However, for many of the overlapping crucial winter ranges, no such conflicts were identified. Recategorization can be done in the future, if warranted. We would like to continue to work with the WGFD in identifying problem areas and establishing priorities for addressing them.

122. Please see the response to comment 8 of letter 98.

123. Snow fence placed adjacent to livestock water pits or reservoirs would be constructed to the standards of the Wyoming Highway Department. Also please see the response to comment 102 of this letter.

124. Please see the response to comment 5 of this letter. It is BLM policy that all renewable resource improvements and treatments must be constructed to BLM standards unless specific analyses indicate that modifications or exceptions are justified. Flexibility for deviation from the fencing standards for specific resource management reasons may be permitted individually. Minor deviations from BLM standards must be documented in the project file. Substantial departure from BLM standards is analyzed in site-specific environmental analyses and coordinated with interested parties, including the WGFD.

125. In-stream structures can be effective tools for improving stream zones and riparian systems. The need for in-stream structures in specific stretches of stream would be determined during activity planning.

All troughs will include escape ramps.

126. We feel the projected growth rate is a reasonable one for purposes of analysis. Any projection of future rates of oil and gas activity is subject to challenge, since nobody can predict the future with any certainty. Another commenter said our projection was too high. The data points are so scattered that a wide variety of growth rates would be within the confidence limits of a linear regression, so that technique is not considered particularly useful for projecting future activities.

Many unpredictable factors can influence the rate of oil and gas activities, including market prices, international political relations, or discovery of a major hydrocarbon reservoir.

127. By definition, lands within KGSs are more likely to be developed than lands outside KGSs. Even so, it is not reasonable to think that every acre within every KGS will be developed or that all development will occur at the same time. Development will occur over a long time and will proceed with regulation of spacing, reclamation, and consideration of other values.

128. The federal drainage program is mandated by law. Disturbance resulting from this program has been minimal in the past and is expected to remain minimal in the future.

129. Because of a need to address watershed problems, the critical watersheds have been identified as needing management above and beyond standard management practices. Watershed problems or potential problems that cannot be mitigated through standard management practices are not known to be present in other areas.

Obviously, the establishment of priority for critical watersheds for intensive reclamation does not mean that disturbances in other areas would not be reclaimed. Miles of roads to be reclaimed and specific schedules will be determined during activity planning, after the critical watersheds have been inventoried.

130. The practices you mention most certainly could be used, and it is likely that they would be prescribed where appropriate as a result of AMP or HMP development. Management actions to control erosion and improve water quality are not limited to those specifically listed in the proposed plan.

131. Stipulations are developed for surface-disturbing activities during site-specific analyses. If a restriction is necessary to provide adequate protection for a resource value such as bighorn sheep lambing areas, it will be applied to the activity. This document contains an appendix detailing the revised Wyoming BLM standard mitigation guidelines. The wildlife mitigation guideline in the revised appendix includes seasonal restrictions for birthing areas for big game; it is not limited to elk calving alone.

132. Thank you for pointing out this error. The intent was to say that some of the losses would be of shorter duration than others.

133. As with locatable mineral withdrawals, areas are closed to oil and gas leasing only when they contain important values that cannot be adequately protected by other means. Our authority to manage surface disturbance associated with oil and gas exploration and development is sufficient to maintain habitat quality in the planning area.

We recognize that oil and gas activities do have the potential to affect wildlife habitat greatly. All oil and gas leases are issued with stipulations to protect surface values, including wildlife habitat. If analysis of exploration or development proposals indicates that effects on habitat would be unacceptable, these stipulations can be enforced to protect wildlife habitat values.

134. We agree that not all parturition areas have been identified and that they change over time. Obviously, reduced survival of young elk or bighorn sheep could occur in areas not yet identified, as well as in known parturition areas. Thank you for pointing out this information.

135. The proposed plan identifies the general types of habitat improvement projects projected for each HMP area. Specific projects and their locations will be identified during activity planning (preparation of HMPs). The HMPs also will establish priorities and schedules for implementation. Implementation schedules are subject to funding and workforce limitations. The WGFD will be consulted for input into the HMPs.

136. Please see general response 1.

137. Please see general response 1.

138. Please see general response 1.

139. Please see the response to comment 84 of this letter.

140. Under the proposed plan, oil and gas resources would be managed through application of the Wyoming BLM standard mitigation guidelines with special emphasis on protecting other resource values, including wildlife habitat in specific areas. This is consistent with national policy of making of energy resources available for development and the principle of multiple-use management of the public lands.

141. Please see the response to comment 11 of this letter.

142. Please see the response to comment 1 of letter 25. The Island the white pelicans occupy is Bureau of Reclamation acquired land; therefore, it is not available for mineral development.

143. Please see the response to comment 118 of this letter.

144. Your suggestion will be considered along with other options when existing FMPs are updated. The WGFD will be invited to participate in revision of our FMPs. The first to be revised will be the Shirley Mountains FMP.

145. Please see the response to comment 19 of this letter.

146. Please see general response 9.

147. In general, we agree that access to the Continental Divide National Scenic Trail is important; however, the actual route of the trail has yet to be identified. Primary and secondary routes will be identified in the RAMP for the Continental Divide National Scenic Trail, and at that time specific access needs can be determined. Until then, it is appropriate that other access needs receive a higher priority.

148. Please see general response 10.

149. Withdrawal review is scheduled for FY 88 and FY 89. During this review, the BLM must determine whether each withdrawal is needed for the purpose for which it was originally placed in effect. For public water reserves, this means the water source must be capable of supporting domestic or agricultural uses. Also please see general response 10.

150. Please see general response 10.

151. As we stated on page 11 of the draft RMP/EIS, the rangeland management program is needed so that the BLM can manage public lands and resources properly. It is also needed to stabilize the livestock industry that is dependent on public lands and to provide for orderly use, improvement, development, and reclamation of public lands for livestock grazing consistent with multiple-use management objectives. Alternatives developed with consideration of management actions solely for one use would not be consistent with our multiple-use mandate and would not be reasonable alternatives. The range improvements presented in the RMP/EIS all include consideration of other resource values.

152. BLM policy requires that any changes or adjustments to active preference be based on monitoring, evaluation, and consultation with all affected parties. Therefore, the livestock grazing level in all alternatives would start at the active preference level and would then be adjusted on the basis of data acquired through monitoring.

153. Please see the response to comment 105 of this letter.

154. Please see general response 10.

155. Please see the response to comment 36 of this letter.

156. The ORV designation for the Dune Ponds Cooperative Management Area has been clarified in the section on ORV management under "Recreation Management" in the proposed plan / chapter 3. Also see map 33 in that chapter. We will coordinate with the owner of adjacent private property and the Wyoming Land Commission to limit effects on resources in that area.

157. The area you describe has been incorporated into the Sage Creek HMP area in the proposed plan.

158. Thank you for pointing out this error. The sixteen HMP areas are defined under "Habitat Management Actions" in the section on wildlife habitat management in the proposed plan, chapter 2 of this document.

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1660 Lincoln Street, Suite 404 • Denver, Colorado 80295
303 860-0099

September 18, 1987

Mr. Richard Bastin
District Manager
Bureau of Land Management
P. O. Box 670
Rawlins, WY 82301

Dear Mr. Bastin:

On behalf of the Rocky Mountain Oil and Gas Association (RMOGA), I would like to take this opportunity to comment on the Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS) for the Divide/Washakie Bow Resource Areas. RMOGA is a trade association comprised of hundreds of members who account for more than 90% of the oil and gas exploration, production and transportation activities in the Rocky Mountain area. Consequently, we are vitally interested in how the Bureau of Land Management intends to manage its lands with regard to maintaining opportunities to explore for and develop energy resources.

1 We are concerned that the BLM has not provided sufficient information regarding the impacts of surface land use decisions on oil and gas activities, while the BLM has provided the public with acreage figures for lands subject to seasonal restrictions and surface disturbance restrictions, it would prove much more helpful if this information could be portrayed on a map. While we realize that many of the different seasonal and surface disturbance restrictions overlap in certain areas, an aggregate map should be developed so that a comparison can be made with regard to mineral potential and proposed constraints.

In general we oalieve the Divide/Washakie Bow RMP provides the public with an acceptable compromise as to management decisions the BLM has proposed. However, there are several items which we believe are necessary for the BLM to reconsider in order for the plan to be more understandable.

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District Manager
Bureau of Land Management

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2 Of primary concern is the statement by BLM that 3.4 million acres or 28% of the federal mineral estate will be subject to seasonal stipulations. The BLM has not made it clear whether the lands subject to special stipulations are only public lands or whether split-estate lands are included. It is imperative that the BLM provide a precise explanation as to how and where special stipulations will be applied.

We would like to point out that BLM Director Robert Burford has established the policy that special stipulations are not required on split-estate lands. Desnore Order No. 1 requires that the oil and gas operator is responsible for reaching an equitable agreement with the private land owner on resource protection measures or a damage settlement, or both. BLM's responsibilities on private lands extend only to the task to provide information on the presence of listed and endangered species, and possibly cultural resources to a certain extent. In addition, there are numerous legal decisions which clearly state the government can only apply mitigation measures to the extent they can be enforced. It is virtually impossible for the BLM to enforce certain stipulations on private lands. Consequently, we would like assurances that the BLM is not applying special prosecution measures to lands which involve private surface/federal mineral estate.

3 Another area of grave concern relates to the proposed Washakie Basin National Natural Landmark (NNL). BLM states on Page 229 of the DEIS that designated and proposed NNLs would be considered during the review of proposed surface disturbing activities in an effort to minimize the disturbance of values characteristic of the area. We are adamantly opposed to the proposal to add an additional layer of protection on an area which includes a major portion of the Washakie Basin Field Known Geologic Structure (KGS). The BLM and National Park Service (NPS) believe the Basin has important paleontological resources and high scenic values but it also has proven oil and gas reserves. While industry is not opposed to mitigating adverse impacts on cultural and scenic values, these values should not be afforded priority consideration over oil and gas resources in a KGS.

The fact that NNLs are administered by the National Park Service gives us cause for alarm. The management charcoal of the NPS and the BLM are vastly different in philosophy. NPS lands are not managed for multiple use purposes, but rather for preservation of resources. BLM, on the other hand, is required to manage its lands to allow for multiple use. It is our recommendation that the Washakie Basin be dropped from consideration as a National Natural Landmark due to the conflicts which would inadvertently arise between oil and gas activities and the values for which the area would be designated. Adequate protection of paleontological and other surface resources will be provided as a matter of course without the added restrictions associated with NNL designation.

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Bureau of Land Management

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4 We are confused about the proposed management of areas currently under consideration for designation as Areas of Critical Environmental Concern (ACECs). The DEIS indicates that the proposed ACECs will be managed in accordance with standard protection requirements. However, the Standard Protection Requirements encompass all possible stipulations, including those which are so restrictive as to effectively preclude all oil and gas activities, such as No Surface Occupancy. Theoretically, all these areas will be open to leasing, but under what constraints? It is not helpful for BLM to indicate that the lands will be open to leasing without specifying exactly the types of constraints which will be used. We strongly recommend that BLM provide much more specific information in the intended management of these areas in relation to oil and gas activities.

5 With regard to the Standard Protection Requirements, we question the language in the No Surface Occupancy (NSO) Stipulation. We are extremely concerned that all exceptions to the NSO stipulation may only be made through a land use plan amendment. This wording differs significantly from the language of Wyoming stipulations we received from the Wyoming BLM State Office in 1986. According to the State Office, an NSO stipulation may be waived by the State Director or through a land use plan amendment. We are concerned that the requirement for a plan amendment would serve to delay or preclude the consideration of BLM's decision-making process. It also undermines the authority of the local or district-level managers who are responsible for making reasonable decisions regarding appropriate management practices in the Resource Areas. Waivers should be determined on a case-by-case basis as to whether an NSO restriction is actually necessary. If it is determined that an operation can be conducted satisfactorily, a waiver of the stipulation should be granted with a minimum of delay and without the complicated procedures described in the plan.

Furthermore, we believe an amendment of the plan is unnecessary for purposes of waiving a stipulation. It is our belief that a thorough NEPA analysis has adequately since the public and BLM have already been involved in the planning process and afforded an opportunity to comment on BLM procedures for determining appropriate surface mitigation measures embodied in the plan. It is BLM's responsibility as land managers to make stipulation waiver decisions using the Bureau's expertise and qualified personnel. The public cannot be rallied upon to make these types of decisions for the BLM. Therefore, we strongly recommend that this procedure be modified to give the authorized officer the prerogative to grant reasonable and appropriate waivers of NSO stipulations.

6 Another item of concern is the statement on Page 143 in which BLM indicates that the oil and gas industry is the largest user of industrial ground water in the State of Wyoming. In most cases, the oil and gas operator trucks in any water that must be used for its operations. It is our understanding that

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6 through a comprehensive state-administered permitting process, most of the ground water generated from an oil well is usually reinjected into the aquifer. Therefore, we question this statement and would like the BLM to document its figures.

7 We also have issue with the instruction by the Wyoming Department of Environmental Quality (DEQ) that "injection wells . . . provide a potentially grave threat to the deeper aquifers. Local deterioration of nearby drinking water aquifers is a possibility when underground injection is being considered. . . . Improper well completion is a common cause of drinking water aquifer contamination near injection operations." The Environmental Protection Agency, State and Federal laws and regulations to protect water quality should prevent any significant deterioration of ground water. Disturbance of an aquifer by an injection well is a very rare occurrence. However, in the event that such a problem occurs, the problem is corrected immediately to prevent any further deterioration. We seriously question such allegations and request specific verification in support of these claims.

We support the adoption of Alternative C as the Preferred Alternative. Alternative C proposes to place reasonable constraints for threatened and endangered species only on the 1.5 million acres of BSA lands not constrained for other specific purposes. This alternative provides more than adequate land management direction and mitigation measures for sensitive resources in the planning area. The Divide/Medicine Bow Resource Area contains millions of acres of highly valuable oil and gas lands. Such potential must be given a high priority during the formulation of land management planning decisions. It is BLM's responsibility to make appropriate trade-off decisions based upon the capabilities of the land to produce oil and gas. Areas such as the Divide/Medicine Bow Resource Area are high ranked when viewed on a national level. There are very few areas which have the ability to produce as much of needed domestic reserves as this area. According to the Interior Board of Land Appeals (IBLA), the Bureau of Land Management must be able to adequately justify any restrictions on oil and gas activities. Further, the IBLA has directed that it is illegal for the federal government to overly constrain future oil and gas development in favor of certain surface resource values which may be protected with lesser restrictions.

The BLM has all the information required to make a thorough analysis of the resource values within the planning area in order to determine which resources require special attention. BLM should review this data and identify lands having significant energy potential and prescribe actions which would open or maintain access to those resources while meeting minimum legal standards for environmental protection. Areas where conflicting resource values outweigh mineral resource values should be subject only to minimum protection

112E

September 18, 1987

Mr. Richard Bastin
District Manager
Bureau of Land Management

page five

requirements which meet the plan objectives for those resources. Moreover, the plan should provide the rationale as to why normal standards are not sufficient to protect the land use objectives. In our opinion, BLM can meet the objectives discussed above by adopting Alternative C, with the proposed changes we have recommended.

8 One last point we would like to make is that it would be extremely helpful if the discussion of the Preferred Alternative contained all of the relevant data needed to evaluate it. The DEIS is organized in such a way that the reader must refer to the discussion on all the other alternatives in order to get a clear picture of what the BLM is proposing. We recommend that all future planning documents be organized so that all of the important information is reflected in the discussion of the Preferred Alternative.

In conclusion, we appreciate this opportunity to comment on the Draft EMP/EIS for the Divide/Medicine Bow Resource Areas. Please do not hesitate to contact us if you have any questions regarding our comments or our recommendations.

Sincerely,

Alice Prell Bentley
Public Lands Director

CMH:cw

Responses to Letter 112

1. Please see the response to comment 2 of letter 93.
2. Please see general response 8.
3. The areas described as proposed national natural landmarks were identified as the result of preliminary studies carried out by the National Park Service. Designation or nondesignation of these areas is not a part of the BLM's management authority; therefore, it is not addressed in this plan. Your comment will be considered when BLM recommendations pertaining to the proposed NNLs are formulated at the request of the National Park Service.
4. Surface protection stipulations sufficient to meet the objectives for each ACEC would be applied to leases. The lease stipulations would be enforced unless the leaseholder could demonstrate that modification would be appropriate for a specific site and that the values of concern would be adequately protected under the modification. Please refer to the objectives for each proposed ACEC and the appendix to this document that details the standard protection requirements (now called the Wyoming BLM standard mitigation guidelines). Also please see the response to comment 3 of letter 93.
5. Please see the response to comment 3 of letter 93.
6. The statement was taken from the *Wyoming 1986 Water Quality Assessment* (Wyo. DEQ 1986). We believe it is valid, at least for this planning area, where the vast majority of produced water is not reinjected. Most gas pads have water holding pits where produced water is stored until disposed of at central evaporation ponds or evaporated on site. This water is not returned to the aquifer from which it originated.
7. The source of our information is the document cited in response 6, above. The discussion under "Causes of Pollution" is intended to give the reader an overview of potential causes of pollution. It is not intended to imply that they are widespread problems in the planning area. Since no effects are projected in the analysis, the discussion may not be a necessary part of the description of the affected environment.
8. Thank you for your format suggestion. We will consider this in future planning documents. We believe you will find this final document easier to follow.

114A

Wyoming Wildlife Federation
P.O. Box 106, Cheyenne, WY 82003
307-637-5433

September 11, 1987

Mr. John Husband
BLM - Rawlins District
P. O. Box 670
Rawlins, Wyoming 82201

Dear John,

Thank you for allowing the Wyoming Wildlife Federation to review the Medicine Bow-Divide Resource Areas Draft EIS of the Resource Management Plan.

We hope that our concerns will be considered as you compile the final RMP.

Enclosed are our comments.

Sincerely,

Matt Reid
Conservation Program Director

MRR/cp

WORKING TODAY FOR WILDLIFE'S TOMORROW!
Wyoming Affiliate of the National Wildlife Federation

114B

Wildlife and Fisheries

As a planning document this anr and DEIS are inadequate primarily for two reasons: 1) the documents consider wildlife an unequal resource secondary to development of mining, oil and gas, forest products and livestock grazing; and 2) the documents do not protect the wildlife resource free habitat and population degradation.

There is no specific means by which this plan's wildlife goals can be measured. It is a confusing, hard to follow document that gives commodity outputs high priority at the expense of wildlife and fisheries resources and the habitat these resources depend upon. There is an attempt to integrate the management of any of the resources identified in the plan.

1 Wildlife outputs will remain the same even though BLM agreed to increases in some hard objectives proposed by the Wyoming Game and Fish Department.

Wildlife and wildlife habitat will diminish as a result of proposed increases in all of the commodity outputs. It is hard to imagine even maintaining 1986 wildlife population objectives.

2 Raptor protection is extremely weak. One of the raptor protection goals is to allow for oil, gas and coal development. This is not a goal to protect raptors, which are federally protected species.

WWF does concour with the development of Habitat Management Plans (HMP). Overlapping species crucial ranges should be given special consideration in HMP development.

Livestock Grazing

There are problems with overgrazing in the resource area.

According to the draft RMP 28.4 % of the range is in only fair condition while 1.1% is in poor condition. 81 grazing allotments have a downward ecological trend; and 42% of the public land requires range rehabilitation because of inadequate range production or species composition, downward range trends, poor animal distribution or improper seasons of use and turnout dates.

The above data from the draft EIS indicates that there are serious range conflicts associated with livestock occurring on the public lands within the RMA.

This becomes especially disconcerting when compared to the draft's proposed call for a 16% increase in grazing AUMs. This increase is to be allowed as a result of an alleged increase in range productivity.

114C

WWF is very skeptical that any increase in grazing AUMs can result from increased range productivity on the RMA in light of the poor range conditions documented in the draft without first reducing AUMs temporarily.

3 The plan is deficient because it makes no attempt to analyze the impacts of current grazing patterns on soil, water and habitat resources. It is also very sad that riparian habitat protection on a multi-million acre desert resource area has been relegated to a token 67 acres. Riparian habitats on the RMA need much more consideration for protection and enhancement.

Minerals, Oil and Gas Management

4 The environmental impacts of mineral development have not been specifically addressed in the draft EIS. There has been no environmental analysis of oil and gas leasing although over 1 million acres of the RMA are leasable. This is a problem. Once BLM has issued a lease, development cannot be stopped. These mineral, oil and gas leasing impacts must be addressed specifically and cumulatively if the plan is to be a realistic document.

Revised Coal Appendix

5 WWF supports the structural changes to the draft appendix agreed upon by the Wyoming Game and Fish Department, National Wildlife Federation, Wyoming Wildlife Federation and BLM at the consensus meeting of late August 1987. These structural changes enhance the document's wildlife mitigation measures.

6 WWF strongly recommends that no action be taken with the Wild Horse Draw mine proposal until reclamation is proven successful on other leases, especially China Butte.

The China Butte mine plan mitigations have been agreed upon except for an agreement to reduce grazing pressure in allotments to the south of Muddy Creek. All agreements must be met and this reduction of livestock AUMs is recurring.

7 At the Atlantic Rim proposed mine the only acceptable route for road and rail facilities is the 20 mile road. Any other route will dramatically impact wintering wildlife.

8 Proposed mitigation for the loss of elk forage (in regards to item 4, page 28) includes livestock grazing reductions in both the Atlantic Rim and Cow Butte areas to offset the direct loss of forage and displacement of elk.

We must stick to the original mitigation agreements between Rocky Mountain Energy, RME, WWF, Wyoming Game and Fish Department and the BLM.

114D

9 There should be no mine activity at the Cow Creek mining proposal area until Atlantic Rim is fully reclaimed and usable as elk winter range.

Forestry

10 The claim that the creation of a 60/40 forage/cover ratio in all commercial timber areas will improve big game habitat is fallacious and simplistic. Most timbered BLM tracts are small and adjacent to large areas of non-timbered lands. In such cases the cover value of the timber may be much more important than the forage value. The limiting factor for elk may not be forage, but escape cover. In such cases if cover is removed by logging the habitat effectiveness of the area will be decreased, and carrying capacity will be lost.

The WWF urges the BLM to reconsider logging in areas that provide necessary hiding cover for big game and analyze the effects that clear cutting would have on habitat effectiveness before deciding to remove timber. The 60/40 forage/cover ratio should be applied to a minimum of 3,000 acres and preferably 5,000 acres of habitat in the Sevenmile, not just a few hundred acres that the agency chooses to manage.

11 Another questionable assumption that the BLM makes is that beetle-infested timber must be removed to create a healthy forest. This is not necessarily true. Unmanaged beetle-infested timber will, over the years, die and fall and be replaced naturally by younger trees. The organic material from the dead trees will be returned to the soil to nourish the new growth. The new trees will not become infested until they reach a diameter of 9", at which time the cycle may repeat itself. This may take 100 years in this climate.

12 The WWF asks the BLM to evaluate the costs of administering timber sales and limit sales to those areas where it will be profitable for the Agency. BLM should consider prescribed burns in areas where beetle kills are most severe and logging would not be profitable.

Recreation

13 Recreational opportunities by type and area need to be defined. An OHV plan needs to be specifically implemented and then enforced. Critical wildlife winter and birthing areas, erodible habitats, sand dunes and riparian zones should be strictly off limits to OHV use.

Primitive and semi-primitive opportunities and areas need to be specifically addressed and identified.

Hunters spent over 15 million dollars in the Rawlins RMA during 1985. In light of the energy slump this economic benefit becomes even more significant.

114E

In the planning document. This important recreational pursuit is given secondary priority to livestock grazing in many logging prisrams such as livestock grazing and logging. It is also assumed that this results from existing agricultural laws and oil and gas wells while sustaining a huntable big game resource at the same time. This interpretation of the law is not a multiple use document. It is a document that features energy development as a primary theme. The wildlife resource and the people who live within the BRA will be the losers over the long term if this document is not changed.

Wilderness Study Areas

14 Wilderness recommendations for Bennett Mountains, Prospect Mountain and Encampment River Canyon seem arbitrary and show an unwillingness to manage these areas as wilderness. No reasons are given for either the wilderness or non-wilderness recommendations.

Bennett Mountain. Even though expected oil and gas exploration would surface the area, there is only one mining claim in the WSA, and continued BLM use would degrade opportunities for solitude and primitive recreation (p. 41). Wilderness designation, the WSA is recommended for non-wilderness. The reason for this is not given.

Since the WSA offers the only opportunity for high quality primitive recreation and solitude for many miles the BLM should preserve this opportunity for many years to come. It can be degraded over time by the insidious encroachment of incompatible land uses. None of the other values in the vicinity (timber and livestock grazing especially) would be adversely affected by wilderness designation, wherein the conservation values would be the BLM to recommend Bennett Mountains WSA for wilderness designation.

Prospect Mountain. WWF commends the BLM for recommending Prospect Mountain for wilderness designation. Although it is only 1,140 acres in size, it contains important winter elk use habitat and riparian elk habitat. Both of these riparian areas comprise only 1% of the WSA yet is critical that they not be overgrazed by livestock in the early spring when they can provide adequate forage for winter survival of dependent wildlife. Huntable game values would also be more important to local economies than livestock grazing, and could be allowed to flourish free livestock competition or normal watering areas.

Encampment River Canyon. It seems incredible that this WSA is not recommended for wilderness designation. It has outstanding characteristics in terms of its recreation and solitude. It has very good trout fishing. It is traversed by a very well maintained trail that connects with the Continental Divide National Scenic Trail and access to the Encampment River which is overall river corridor along the Encampment River that is proposed for National

114F

Natural Landmark status is in the WSA and is very scenic.

15 In addition to all these attributes the entire canyon is crucial winter range for Baborn sheep. Repetition of recent Sierra Pelona resident Jim Anderson, BLM hazards and forage competition by cattle could be alleviated by wilderness designation and eliminations of cattle from the WSA. The DEIS suggests constructing livestock exclosures around impacted campsite sites on the river. This likely would not only be economically infeasible, but would detract substantially from the primitive recreation experience. Who wants to camp in a corral? It also would not alleviate the competition for forage by cattle concentrated in the riparian areas.

There are no existing oil and gas leases in the WSA, and potential for oil and gas is low. Expected mineral exploration would not materially affect wilderness values and the few existing mining claims concentrated along the border of the WSA are not expected to be developed.

16 No cost analysis of the new allotment boundary fence proposed to control cattle movements in the WSA is offered. It is unlikely that the proposed fence would prevent significant livestock competition for forage in the critical riparian areas, and it is likely that the cost of the boundary fence along with the cost of campsite exclosures would make the projects far from cost-effective.

WWF strongly suggests that cattle grazing be phased out of the WSA to provide forage for the more economically important Baborn sheep. It makes no sense to invest money to perpetuate a use that is in direct competition with another use that will return considerably more money to the local economy without any investment at all.

If stream habitat improvements cannot be made without building roads they should not be done. If they can be done without harming the wilderness quality of the WSA they should be done before it is designated wilderness.

The WWF urges the BLM to manage the Encampment River Canyon WSA for its highest and best use, which is Baborn sheep habitat and wilderness. In an area of the state now being severely impacted by road building, intensive logging and a large scale water diversion project, an opportunity to preserve a small area for primitive recreation and wilderness solitude should not be lost. There won't be any more such opportunities coming along.

Comments Medicine Bow/Divide Draft EIS

Cost Benefit Analysis

17 The most glaring flaw in the RMP is the lack of a cost

114G

17 analysis of any management proposals. How can the grazing program be said to be even-sided without knowing what the returns and costs are? Why are gross income figures presented for timbering but not for any other program? If the returns to the state's economy vs. cost associated with providing wildlife habitat were compared with taxes and returns from the livestock grazing programs there is little doubt that wildlife habitat would provide the most net benefits to the state. There is room for both livestock and wildlife, but in few areas where livestock limit big game numbers by utilizing forage from wildlife winter ranges WWF urges the BLM to reduce livestock numbers where needed to allow enough game animals to survive the winters to meet Wyoming Game and Fish Department herd objectives.

The RMP says it will meet herd objectives in most cases. But fails to say how it will accomplish this with existing livestock AUMs by 27% above the 5 year average at the same time. Intensive herd management is mentioned, but associated costs and benefits are not analyzed. Are the costs of these programs to common to you? They certainly are to us and should be to the public.

ACECs

WWF concurs with the ACEC list provided in page 19 of the draft. All of the proposed areas should receive ACEC designation. WWF also supports putting over-appraised private ranges for sale (pg. 41), where sheep and antelope into ACEC designation. These areas can be determined in consultation with Wyoming Game and Fish Department. All raptor nesting areas should be given ACEC designation.

Monitoring

18 This plan is in direct violation of FLPMA. No monitoring plan is provided to determine on-the-ground impacts of the proposed developments on vegetation, wildlife, soil, water and air resources. The final must have a monitoring plan. WWF would appeal this plan on that point alone.

Proposed Public Land Disposal

The proposed disposal of 103 square miles (66,000 acres, if public lands in the Medicine Bow-Divide Resource Area appears to be an attempt to implement the privatization proposals of past Interior Secretary James Watt which were blocked by Congress

19 Such a large scale disposal of public lands is not in the public interest. It also is inconsistent with the RMP's stated aims (page 5) for disposal in the northwest portion of T.21 N., R. 87W (Resource Management Plan DEIS, Map 7, page 7), were identified as needing additional land acquisition to improve public access for recreationists. (See Resource Management Plan DEIS, Map 12, page 81).

114H

The BLM's reasons for the privatization of these public lands are that they are isolated and difficult to manage. Yet a large number of these lands are near roads, are in the line of federal, state, and county roads and provide important public recreation benefits.

20 The Wyoming Wildlife Federation asks that the BLM clearly state in the final plan what real public access is available to each parcel of public land it agrees for disposal as well as the net affected disposal will have on public benefits. In addition, this should be provided in the plan that shows all public access roads in the vicinity of the lands proposed for disposal.

21 The BLM confuses the disposal issue by claiming the lands proposed for disposal may be unavailable for trade as well as cut right sale (Resource Management Plan DEIS, page 111). However, since no specific plan for trading these land is discussed in the plan it is likely that most of these lands will be sold. The final plan should state where possible which lands are scheduled for trade, and which are scheduled to be sold. In order to maintain credibility with recreational users of public lands, the BLM must work to increase the accessibility of these lands where possible, instead of disposing of them.

Demands for recreational use of public lands is increasing thereby underlining the importance of increasing access to public lands as well as keeping public lands public. The BLM should put more emphasis on land trades rather than disposal, in order to solve management problems and open lands open to public use.

114I

Comments on the Appendices of the DEIS

22 Forestry Appendix - The stand eradication projects discussed here are simply described as complete removal of existing trees to regain the area for regeneration. Stand eradication projects that completely remove every tree are going to eliminate habitat from martin, owls, kestrels and other cavity nesters. Old growth should be recognized as something more than a useless patch of habitat.

23 WWF advocates nearly universal road closures in forested areas because after logging over all of the appendices, and noting the extent of known geologic structures it is obvious that wildlife habitat is going to be at a premium. Contiguous habitat is going to be very scarce.

24 Limitations on activities in the vicinity of active raptor nests seem to be predictive in nature. For example, they will not allow an activity within one mile of a certain nest between date a and date b if the activity will result in nesting failure and abandonment. This seems to be more of a loophole than a guarantee to prevent impact. If the activity will disturb the nesting activity, impacts are not going to be known until after they happen. For the sake of wildlife we ought to presume that the activity would interrupt the breeding activities of the species and the buffer zone should be enforced in every instance.

Livestock Grazing - Most grazing leases are in C conditions. As a result WWF believes it is time the BLM got tough with their lessees. This is not private land; it is meant for multiple use and the BLM ought to increase its field presence in order to achieve range improvements by enforcing cooperative plans with lessees. BLM should grazing permits instead of merely issuing warnings where permittees continue violations.

25 WWF also supports the no exceptions be made to fencing criteria. There have already been too many exceptions made statewide to the detriment of free roaming wildlife. WWF supports no trespass in fencing standards.

26 WSA's should be "hands off" for rangeland improvements. The BLM is very short on wilderness areas and to take a chance on compromising a WSA before it can be considered as wilderness is to lessen its chances of being designated that way.

27 All livestock operators should be required to file actual use reports showing how many livestock grazed each allotment and/or pasture and for how long. The BLM will supervise use on allotments throughout the grazing year. The word will definitely be replaced by the word "will".

Statewide we know that public land has been abused.

114J

Permittees have run more cattle than they said they had, and the management practices often have been inadequate to maintain range conditions a WSA before it can be considered as wilderness is to lessen its chances of being designated that way.

28 The BLM should state their legal right to suspend grazing rights to any lessee who denies access to the public. It is public land and anyone who violates that access to the public should be warned that they are going to lose their grazing lease. It is time the BLM started to exercise that prerogative; to our knowledge this had never been done in Wyoming.

WWF supports the BLM's desire to improve priority 1 water systems, including Bear Creek, Sage Creek and Hegarty Creek. The Sage Creek drainage caused a large amount of sediment to the fishery of the North Platte River. The North Platte changes from class 1 to class 2 at the confluence of Sage Creek. Obviously pollution to Sage Creek must be cleaned up to save the potential class 1 fishery of the North Platte River in this reach. Cattle grazing is apparently a major cause of sedimentation and should be controlled.

29 Wildlife - Aquatic Wetland improvement plantings indicate that about 240 acres of aquatic wetland plantings are spread out over 4 SMP's. This seems inadequate considering the damage that has undoubtedly occurred to wetlands areas as a result of overgrazing. Wetland improvement is usually necessitated by grazing practices and this goes back to the grazing appendix where most of the allotments are in category c, and here we are improving only a small portion. More effort should be directed towards correcting damage to wetlands, or grazing allotments should be reduced if damage cannot be controlled.

30 There are only two acres in all of the HMP areas for Colorado cutthroat enhancement, and the two acres are in the Sages HMP which indicates a single project. This is wholly inadequate for the same reasons that the aquatic wetland improvement program is inadequate. Obviously cattle do damage to riparian habitats, causing siltation and reduction of trout habitat, but only two acres of all the water sheds in the entire district are being enclosed from livestock grazing to protect the valuable Colorado cutthroat fishery.

WWF advocates that fences that have been given exceptions or that have been found to be in violation of fencing stipulations should be returned to their correct standards.

114K

Conclusion

This is an inadequate planning document that needs major changes. We make the following recommendations:

1. Make the planning document trackable and easier to read.
2. Integrate the resources management in a meaningful way.
3. Treat wildlife as a primary resource rather than a resource that is 'mitigated', 'coordinated' or 'adjusted' as needed to accommodate commodity output.

That is not multiple use:

4. Develop a cost benefit analysis of all management programs;
5. Develop a monitoring plan and implementation schedule.
6. Decrease livestock grazing to the point that fair to poor condition ranges can improve their productivity.
7. Scratch all uneconomical (below cost) logging.
8. Integrate economically justified logging with wildlife objectives of BLM and the Wyoming Game and Fish Department.
9. Amend and improve the coal appendices based on agreement with WWF, WWF, BNE Wyoming Game and Fish Department and the U. S. Fish and Wildlife Service.
10. Develop a specific recreation plan by type and area. This includes primitive and semiprimitive recreation, hunting and fishing. Acknowledge the significance of hunting and fishing recreation; and
11. Specifically develop planning for immensely increases protection of riparian habitats, crucial winter ranges, rare habitats and critical wildlife habitats.

Responses to Letter 114

1. Please see the response to comment 3 of letter 103.
2. Please see the response to comment 13 of letter 103.
3. The effects of current grazing practices are analyzed as a part of the environmental consequences of Alternative A in the draft RMP/EIS. Also please see general response 7.
4. In both the draft RMP/EIS and this proposed RMP/final EIS, the impacts from mineral development (including oil and gas activities) are analyzed to the level of detail appropriate for this tier of the planning process. More detailed analysis will be conducted during activity planning. The planning tiers are described in general response 2.

   For purposes of comparing impacts under the different alternatives, we made assumptions about future exploration and development. The documents contain analysis of the environmental effects of mineral development on cultural/natural history resources, livestock grazing, mineral resources, recreation, soils, and water, and air, visual resources, and fisheries and wildlife habitat.
5. The Wild Horse Draw area has been dropped from further consideration for coal leasing.
6. The revised Coal appendix to this document addresses the mine plan mitigations for China Butte under unsuitability criterion 15. Sufficient forage would be provided to maintain WGFD target populations for wintering antelope and deer in the area.
7. The revised Coal appendix to this document deals with access to Atlantic Rim. Routes for access to Atlantic Rim and for transportation of coal from the area would be restricted to those found acceptable through consultation

with the WGFD and other interested parties, and effects on wildlife would be minimized while the coal market and any other foreseeable coal development in the area would be considered. Given present knowledge, the Twenty-Mile Road from Rawlins to the west side of the Atlantic Rim coal area appears to be the least environmentally sensitive route.

8. Mitigation for loss of elk forage is covered in the revised Coal appendix to this final document under unsuitability criterion 15 for Atlantic Rim. Sufficient forage would be provided to maintain WGFD target populations for wintering elk on the Atlantic Rim portion of the Baggs Elk Crucial Winter Range. The degree of overlap of foraging areas, and thus the dietary overlap between elk and cattle, would be determined, and adjustments in livestock management would be made if necessary.

9. The Northeast Cow Creek area has been dropped from further consideration for leasing.

10. Please see the response to comment 65 of letter 103.

11. Please see the response to comment 2 of letter 17. We did not intend to imply that timber stands cannot renew themselves naturally. However, management actions, including harvest, can make timber stands more productive over the long term for both wildlife habitat and wood products.

    Without management, death of trees caused by beetle infestation can lead to a buildup of fuels and catastrophic wildfire. That beetle kills and wildfires are a part of the natural life cycle of lodgepole pine is well documented. The timber harvests create conditions similar to those created by wildfires and allow for regeneration of lodgepole. Through management we can control the timing, location, and extent of disturbances to meet our objectives better.

12. Each timber sale is evaluated to determine whether it might be "below cost"; that is, if it would cost more to prepare and administer than the receipts gained. If a sale falls into this category, harvesting still may be necessary because of other considerations such as insect or disease problems or wildlife habitat needs. Such a sale is identified in our budget submissions along with specific justifications.

    Prescribed burning will be considered for use in areas where it would improve a specific situation while meeting management objectives.

13. An ORV implementation plan will be prepared on the basis of designations outlined in the final RMP.

14. Please see general response 1.

15. Please see general response 1.

16. A benefit/cost analysis will be prepared for each grazing treatment before it is implemented. Also please see general response 1.

17. Gross income figures were included in the analysis for forestry because they were readily available and varied substantially from one alternative to another. As noted above, a benefit/cost analysis will be prepared for each grazing treatment before it is implemented. BLM managers consider such economic determinations, along with many other factors, before a given grazing treatment is adopted.

    The economic effects of most of the management actions would not vary greatly from one alternative to another; therefore, any further presentation of an analysis would not help managers to choose a course of action.

18. Please see general response 5.

19. Because of the nearness of the area you mentioned to Rawlins and the checkerboard landownership pattern in the area, there will be increasing demands on these lands for community expansion, economic development, and recreational activities close to town. Map 12 in the draft RMP/EIS delineates areas in which the BLM would like to obtain access across private lands. It does not mean that we are proposing to acquire lands in that area. The plan was prepared with recognition of the values of this area, and it allows flexibility to meet local planning objectives and public demands in the future. Also please see general response 9.

20. Please see general response 9.

21. Please see general response 9.

22. Stand eradication would not affect old growth values such as cavity nesting habitat. It is proposed for stands that are severely overstocked, small, and stagnated and for areas that are referred to locally as "dog hair." These stands consist of stagnated lodgepole pines that are small in diameter and short because of overcrowding and disease. The trees in these stands would not respond to treatments like thinning because of their advanced age. Trees in such stands would never attain sufficient size to produce the old growth habitat of concern.

23. Over the next 20 years, all roads projected for timber harvest would be temporary roads. Logging roads will typically be temporary unless they also serve some other purpose that warrants keeping them open.

24. Please see the response to comment 120 of letter 103.

25. Please see the responses to comments 5 and 124 of letter 103.

26. Please see general response 1.

27. Actual use information will be requested for all allotments in the planning area as a part of the required monitoring.

28. The BLM has the authority to suspend leases if a lessee denies access across leased public lands. However, that authority does not extend to requiring the lessee to provide public access across private lands.

29. The 240-acre figure is an estimate of the area involved in plantings that would be conducted as a part of the wildlife program. Many of these plantings would be done in "M" and "C" category allotments. They are in addition to the riparian improvements planned by the livestock grazing program in "I" category allotments. Also please see general response 7.

30. A total of less than 1 mile of streams on public lands in the planning area contains Colorado cutthroat trout habitat. Approximately half of this is in Dirtyman Fork Creek in a narrow canyon that receives little or no cattle use. Much of the remaining habitat lies within the two exclosure areas.

115A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

Ref: 8PM-EP

SEP 14 1987

John Husband, Team Leader
Bureau of Land Management
Rawlins District
P.O. Box 670
Rawlins, Wyoming 82301

RE: Medicine Bow-Divide Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS), and Medicine Bow Wilderness Supplement

Dear Mr. Husband:

In accordance with the National Environmental Policy Act (NEPA) and our responsibilities under Section 309 of the Clean Air Act, the Region VIII office of the Environmental Protection Agency (EPA) has reviewed the referenced documents. The EPA appreciated the opportunity to meet with you in July, 1986. The meeting was followed up by EPA's scoping concerns for the project which were sent on August 27, 1986. In addition to environmental conditions and effects, our review is also focused on the RMP as "a comprehensive framework for managing and allocating public land and resource uses" (page 1). Our enclosed detailed comments are intended to make a constructive contribution to this "comprehensive framework".

Based on our concerns and the criteria EPA has established to rate adequacy of draft EISs, we have rated this draft RMP/EIS as Category EO-2 (environmental objections-insufficient information). A summary of our EIS rating definitions is enclosed. The major concerns/recommendations addressed in our detailed comments relate to:

- better description of consistency with water quality standards (existing/designated beneficial uses, use protection criteria, and antidegradation requirements) and the Federal/State water quality management programs.
- inconsistent and insufficient level of analysis of effects on surface and ground water resources/beneficial uses in relation to applicable statutes.
- additional documentation of guidelines/requirements for oil and gas, and coal development.
- questions on adequacy of range management plans to support multiple range/land values under applicable statutes.
- providing objectives for Areas of Critical Environmental Concern (ACEC) management that are adequate to assure resource protection and for consistent ACEC recommendations by alternative.

115B

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- providing additional guidance and documentation needed for protection of riparian and wetland values.
- development of a framework for Clean Water Act/water quality standards and ground water monitoring.
- and inclusion of more specific plans for coordination and implementation, among other items, in an implementation chapter or appendix.

Several features of Alternative B are identified, which would also improve the preferred alternative.

The draft RMP/EIS contains commendable objectives to "meet or exceed established standards for quality of surface water and groundwater . . . where degraded by unnatural causes" (page 61), and to use Wyoming's WQS as "standards" for the planning area (page 466). Our review has identified questions of consistency, and some commendable approaches to management of water resources and it's ecological integrity.

Wyoming's water quality standards (WQS) currently set antidegradation requirements only on waters. Since EPA's antidegradation requirements apply to all waters of the United States, Wyoming will be addressing EPA's requirements this year as part of the triennial review of its WQS. We encourage the BLM to be part of this process and be aware of the applicability of any new requirements that may apply to BLM situations. The State of Wyoming contact person is John Wagner in Cheyenne (777-7015), and the EPA contact person is Jim Lazorchak (FTS 564-1581 or 303-293-1581).

We would appreciate the opportunity to discuss with the BLM its proposed responses and RMP/EIS revisions relating to EPA concerns prior to the RMP/Final EIS. Based on experience reviewing these documents, such a coordination process would be beneficial in helping express our concerns. Please contact Douglas Jeffries of my staff as needed for further EPA coordination at 303-293-1717 or FTS 564-1717.

Sincerely,

Robert R. DeGeorge, Chief
Environmental Policy Branch
Policy and Management Division

Enclosures

cc: Hillary Cohn, Wyoming BLM State Director
David Williams, Office of Planning and Environmental Coordination, BLM Washington Office
Randy Wood, Director, Wyoming Department of Environmental Quality
William Dickerson, EPA Office of Federal Activities

115C

EPA DETAILED COMMENTS ON THE BLM DRAFT
MEDICINE BOW/DIVIDE RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Water Quality Standards, Watershed

Our review of water quality and ecological integrity of water resources is based on consistency with:

- Wyoming's water quality standards (WQS) and water quality management programs;
- Federal agency leadership responsibilities to "protect and enhance the quality of . . . water . . . resources (page 466) through meeting applicable statutes (Executive Orders 11752 and 11514 and Clean Water Act Section 313);
- requirements for RMP consistency with "officially approved or adopted resource related plans, and the policies and programs contained therein, 43 CFR Part 1610.3-2;
- Federal Land Policy and Management Act (FLPMA) policies to "protect the quality of ecological, environmental, . . . and . . . water resource . . . values" (Section 102(a)) and "to meet applicable State and Federal "pollution control laws" and water pollution "standards or implementation plans" (Section 202(b)(3));
- the Clean Water Act (CWA) objective to "achieve and maintain physical, chemical, and biological integrity of the nation's waters" (Section 101(a)), and
- and "NONPOINT SOURCE CONTROLS AND WATER QUALITY STANDARDS" guidance (August 19, 1987) from Chapter 2 of EPA's Water Quality Standards Handbook.

The draft RMP/EIS contains commendable objectives to "meet or exceed established standards for quality of surface water and groundwater . . . where degraded by unnatural causes" (page 61), and to use Wyoming's WQS as "standards" for the planning area (page 466). Our review has identified questions of consistency, and some commendable approaches, regarding management of water resources and it's ecological integrity:

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- The discussion of surface water uses should be expanded to include the beneficial uses prescribed in State WQS (pages 137 and 142).

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- Similar to other RMP/EISs, the statements are made that the alternatives would provide for maintaining existing water quality (page 18 and 23). However, just maintenance of existing water quality may or may not meet CWA, FLPMA, and EO objectives depending on the amount of water quality degradation; nor is there a recognition of providing full protection of existing beneficial uses (which are part of WQS). The intent to maintain water quality seems to be contradicted by other statements, such as on page 271 and 290 where "degradation of water quality" would be held to a "minimum", and on page 288 where grazing management would result in "degradation of water quality" in "I" allotments. Also, we question any consideration for "watershed conditions, wildlife habitat, and vegetation . . . degradation" is only for certain areas (page 5). Page 13 of the water resource area. More definitive RMP criteria and standards are needed to provide CWA and FLPMA consistency and guidance for activity planning, and to describe the "levels of . . . protection to be maintained" required on page 5. Also, the emphasis on "maintenance of class I streams" as "first priority" (page 22) raises a question of meeting WQS in Class II through IV streams that should be addressed.

3
- Under FLPMA requirements to "protect the public lands from unnecessary and undue degradation" (page 124), BLM's policy for managing activities such as mineral development to meet WQS needs to be clearly defined in the text. For example, water quality could be degraded for coal and gas development and grazing under Alternative C (page 122). In fact, there could be "highly detrimental long-term impacts" in "open waters and riparian areas" from oil and gas development (page 180), implying CWA and FLPMA violations.

  Another example is the North Platte River which would be managed as a special recreation management area (SRMA) under all alternatives (page 3). However, the land adjacent to the North Platte River "would deteriorate from the current condition and the quality of fishing could decline" under the preferred alternative because of "existing coal development (page 91). It does not appear that the SRMA designation would contain effective management mechanisms, and the potential for a decline of fishing quality implies a potential for WQS/water quality use violations.

4
- The preferred alternative would "restrict surface disturbances and reduce the potential for soil erosion" on 564,973 acres to protect riparian areas (page 30). Yet, in only "critical watersheds" would management be taken to "minimize soil erosion and degradation of water resources" (page 30). Consequently, the question of consistency is raised again in relation to CWA and FLPMA policies of protecting ecological, environmental, and water resource values. What "alerts to those watersheds not deemed "critical?" "General practices" are listed to "improve water quality in "noncritical" watersheds (page 66), what are the criteria for identifying "critical" versus "important" watersheds? The "general practices" are simple but good environmental techniques, why would they not be applied to activities in all watersheds with monitoring to ensure proper and effective application?

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5 The cumulative ground water impact in areas not designated as "critical" should be assessed in this EIS. The use of unlined mine pits allows infiltration of saline water into the shallow ground water systems. By issuing additional leases which allow this practice (even in "unimportant" watersheds) the potential for significant impacts to the area's ground water resource is heightened. This contamination will have direct impact on wildlife and vegetation at local points of discharge (springs and seeps).

6 ◇ We request that the RMP/EIS deal more thoroughly and clearly with objectives for health of the aquatic systems. One area of confusion is the objective to be achieved. According to page 86, "25 miles of trout stream habitat would be enhanced". Elsewhere, a "positive effect" is to be achieved. On page 39, the objective is to "maintain or improve" the "85 miles of trout stream", is "maintain" a contradiction? The definition of "positive effect" as an objective for aquatic habitat seems too vague and can even mean only a reduced rate of degradation (page 322). Likewise, what does "enhance" mean? Yet, FAP alternatives should contain provisions for sufficient habitat to meet the "population goals established for all wildlife species in the light stringers plan" (page 23), we could not find that the objectives for "positive" or "enhance" habitat effects are adequate to meet that goal, that what the "sufficient" amount of aquatic habitat is by alternative, whether the "fish population goals are consistent with the goals, whether BLM policies in the definition of a "positive effect" or "enhance" meets CWA and FLPMA objectives. Also, all alternatives would prevent "significant damage" to "fish . . . communities" (page 68). We were unable to find RMP/EIS criteria for improvement or allowable reduction of aquatic life ecosystems that corresponds to FLPMA and CWA objectives and that will provide a basis for activity plans.

7 Oil and gas development would have "protective measures", in areas of "important . . . fish habitat" (page 71). Likewise, "long-term disturbance" would be avoided in "high priority standard . . . fisheries areas" (page 66). How was the distinction of "important" or "high priority" made and how will it address such distinctions between FLPMA and CWA objectives? would WQS be violated in "unimportant" streams?

8 ◇ Potential impacts to surface and ground water are a concern with several potential coal lease areas (pages 214-215). Why were only the potential effects on ground water discussed on page 214? The RMP/EIS makes the determination that the new lease areas are acceptable regarding surface and ground water impacts. We question this determination without more specific measurements for acceptable impacts to be met prior to issuing a lease. For example, in two places the discussion prescribes mitigation only to "reduce" the impacts. However, just reducing the impacts may or may not comply with the various applicable statutes and standards. Also, WQS are related only to monitoring plans on page 215, not lease operating requirements. Allowable impairments in beneficial uses should also be part of the information submitted by lessees (and approved by wyoming DEQ). What violations will prompt enforcement action by BLM?

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9 In addition, we found insufficient discussion of effects of coal activity on aquatic life/ecosystems in Chester Four. Likewise the analysis of effectiveness of mitigation to protect Lemmon Reservoir and associated stream beneficial uses is insufficient.

10 ◇ The wyoming DEQ has recognized the need to set up a "management and sediment control study" to address the major cold water stream impairments in Bates Creek (page 466). The source of impairments in sediment probably from "accelerating gully erosion from grazing lands." What does the RMP propose for resolving the problem?

11 ◇ The management actions for "AU" allotments call for improving balanced use, "range condition, and plant vigority without damage to existing resources" (page 202). These objectives appear to contradict the preferred alternative's intention to "improve" ecological conditions of "other allotments with a downward trend" (apparently M, C, and some I allotments) resulting in continued decline of vegetative cover, and "reduced water quality and increased rates of accelerated erosion" (page 208). Consequently, the question of whether the preferred alternative is complying with the statutes, EOs, and other RMP/EIS direction for WQS should be addressed.

12 ◇ The RMP/EIS should describe the "emphasis" that will be placed on management of municipal and/or domestic water supply watersheds (page 22).

13 ◇ The preferred alternative would have "short term . . . local degradation of air and water quality" from forestry activities (page 8). However, there is no reference to the EWA, and the RMP/EIS should reflect the fact that there are no provisions in wyoming's WQS for short term temporary exceedance of standards. The BLM would need to prove that existing beneficial uses are fully protected. The methods to be used in the activity plan NEPA documents to predict effects on WQS/beneficial uses should also be described in the RMP/EIS.

14 ◇ BLM would only reduce "accelerated erosion" in some areas, and "should" increase vegetative cover where "accelerated erosion is not too far advanced" in other areas (page 209). This direction appears to contradict the objective on page 92 to "prevent accelerated erosion" (emphasis added). We suggest stronger commitments. Why shouldn't accelerated erosion be prevented rather than reduced? Why shouldn't "accelerated" erosion in riparian areas be adequately controlled/restored even if it is advanced? We suggest that the RMP/EIS contain more specific standards as objectives. The RMP/EIS should also clarify how BLM is addressing the streambank erosion problems identified in the wyoming 1986 water Quality Assessment.

15 ◇ We commend plans to reduce salt loading in the Colorado River Basin watersheds (page 81). What specific salinity reduction projects are needed or planned? How much reduction is planned? We also suggest a map of the specific target areas for salinity control practices.

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16 Potential adverse effects on ground water, at least for coal mining, are noted on Appendix page 214. However, we found that, in the discussion of ground water resources was very qualitative and not specific to the RMP area, and 2) the environmental consequences chapter does not appear to address ground water impacts. Consequently, we have several suggestions.

- ◇ The limited site-specific data should be integrated with information from general references to develop a good regional picture of ground water resources. We suggest contacting the U.S. Geological Survey (USGS) Office in Cheyenne for any published and unpublished data.
- ◇ The discussion of ground water uses (page 149) is extremely qualitative, giving no real indication of how much ground water is actually being used by all user categories. Quantification of the quantity of water "mined" is necessary to adequately assess the potential impacts on other uses resulting from each alternative.
- ◇ The discussion of occurrence and quantity, page 1491 centers on saturated thicknesses and ranges of well yields. It is very general and provides little actual information on the occurrence of ground water in the resource area. There is no discussion of the regional recharge/discharge areas, depth, or even the number of aquifers which make up the "Fluvial, lacustrine, and eolian deposits" (page 149). Therefore, the potential to be affected by the actions proposed can not be assessed. Additionally, assessment of potential future utilization of these resources is not possible without specific information on the recharge and reliability of each aquifer of the resource. Information for each basin should be provided which describes recharge areas, thickness, areal extent, depth to water, quality (such as fluoride), stratigraphic/hydrologic section, and information on water quality. This general information should be available from the USGS office in Cheyenne.
- ◇ As described above for other sections of the RMP/EIS, the section on quality (pages 149, 152) is also very general and conveys little information on ground water quality in the resource area, especially for all aquifers below the alluvial aquifer systems. Specific water quality information is necessary to characterize the ground water quality.
- ◇ The section on causes of pollution discusses several sources of pollution, all mainly from the energy industry. Information on which aquifers are potentially impacted by the various activities should be included.

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17 ◇ The RMP/EIS raises the issue of potential ground water pollution and the deterioration of aquifers serving as existing water sources as a result of injection wells (page 187). The report states that injection wells, used for salt water disposal and enhances recovery during oil and gas production, pose a "potentially grave threat" to ground water resources of the RMP area. The inclusion of this issue, is somewhat confusing. The wyoming Department of Environmental Quality (DEQ) and the wyoming Oil and Gas Division currently implement the Underground Injection Control (UIC) program in the State. Pursuant to this program, UIC permits are issued only upon an adequate demonstration that underground sources of drinking water will not be degraded as a result of the proposed injection activity. This goal is achieved through the State's regulation of well construction and operation. The exempt from UIC's 1986 water Quality Assessment gives the impression that such regulations so not exist.

18 ◇ The preferred alternative would designate five million acres as open to oil and gas leasing (with subsequent injection activity). There was however, no discussion of the potential impacts to ground water resources resulting from this mineral management decision.

19 ◇ The UIC program's authority begins when the fluid enters the wellhead. It is the surface management agency's responsibility to regulate the storage and handling of produced water prior to injection. Good environmental practices, such as proper design of brine pits, appear to be considered just for "important" (and possibly "critical" watersheds (page 466). Such practices should be required to all leases with monitoring to insure proper and effective application.

20 ◇ The alternatives consider making various amounts of land available for coal leasing consideration. Historically, the impacts have resulted in increased ground water salinity in the mainstream spirits. In some coal regions in Colorado and wyoming, the issue of cumulative impacts of salinity loading by mines is resulting in BLM's reconsideration of its ability to continue to lease coal. The issue should be considered in the early planning stages (at the RMP/EIS level of planning) to avoid possible problems later on of costly land exchanges.

21 The discussion of "SIGNIFICANT REGULATIONS" for soil, water, and air resources on page 466 should also include the water Quality Act of 1987 (particularly the Section 319 nonpoint source (NPS) control implicit), the water resource protection and other water quality requirements of FLPMA, and Executive Order 12088. The discussion of the law should include: 1) the objectives for water quality/ecological integrity, the WQS program, Section 313, NPS compliance), and correlation of land management practices (MPAs) to meeting WQS.

115I

Grazing/Range Management

We have several concerns regarding RMP/EIS direction for grazing and range management that should be addressed in revisions of the draft RMP/EIS.

22 ○ The objectives of Alternative B: "To manage livestock grazing to enhance wildlife, watershed, and riparian values" (page 46); to reduce "livestock conflicts with other resources" (page 47); and to plan range improvements "with full consideration of soil, water, and air resources" (page 234), appear to be reasonably consistent with FLPMA policy, e.g., Section 102(a)(8); and other statutes (given the question of what "full consideration" and "enhance" mean). Meanwhile, the consistency of the preferred alternative, i.e., "To manage livestock grazing while maintaining a balance between economic use and management to enhance watershed and riparian values" (page 46), with FLPMA and other statutes is not clear. We were unable to find adequate support for the statements that the "benefits of implementing the allotment management plans and projects under the preferred alternative "would be similar to those discussed for Alternative B" (page 291), and that "grazing will continue management" would be achieved (page 51). The intent to make eighty percent of any increased forage available to livestock is unclear (page 180) unencounters the issue of whether the preferred alternative adequately provides for watershed, wildlife, recreation, and other rangeland ecosystem values. As an example, we question whether "seeding of 11,300 acres of depressed sites" actually would "protect the soil from erosion" (page 291) with such a heavy emphasis on livestock grazing. More assurances with RMP standards are needed. Also, AUM-denominated uses are not subject to a cost-benefit "balance" process such as suggested by the preferred alternative.

23 ○ "Improper turn-out dates and seasons of use" exist on eighty-one percent of the "1" allotments (page 113). The relationship of improper season of use to rangeland decline in the EIS area is pointed out on page 176. Yet the preferred alternative provides spring deferment on only two allotments (Table LVG&V). Consequently, we question the effectiveness of the preferred alternative in resolving the season of use issue in terms of riparian ecosystem and watershed protection needs. What are the standards to be achieved by allotment plans for spring grazing management?

○ Alternative B would be quicker in responding to known rangeland problems (page 256) compared to the preferred alternative (page 291). Moreover, the discussion of "some benefits where problems are known to exist" on page 292 implies quicker action under the preferred alternative than discussed on page 291.

24 ○ Some "ranges have been overstocked and overused" (page 179). Yet the preferred alternative projects substantial increases in animal unit months (AUMs) of grazing. How has the problem of overuse been resolved? In fact, one of the questions to be answered in the AMP is the appropriate livestock stocking levels and adjustments needed "in order to provide adequate forage for livestock, wildlife, and watershed protection" (page 171). This question is consistent with BLM requests for DMP documentation of resource management standards. We were unable to find that the question was fully answered.

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25 ○ The RMP/EIS states that "many wildlife species would be virtually unaffected" by the alternatives considered, and other species would not be discussed "because of inadequate inventory data, lack of information necessary to predict impacts, such as trend, or insignificance of potential effects is insufficiently documented, or correlated to AGS.

26 ○ The RMP/EIS also states on page 183 that "nongame" and "warm-water" fish were not considered. However, the CWA protects those fish as well as other species of "biological integrity," such as trees. Criteria for significance of potential effects is insufficiently documented, or correlated to AGS.

27 ○ Herbicides "(such as 2,4-D) will be applied . . . in accordance with procedures established in . . . the BLM manual" (page 208). As requested in our scoping letter, we ask for disclosure of potential effects of herbicide including for ground water for the resource area (in more detail than in BLM's Northwest Area Noxious Weed Control Program EIS and Supplement), and TAMP/EIS contents to avoid spraying alien grasses and streams and near populated areas". The consistency of the spraying program with grazing control commitments to hold present infestations/expansions constant-to-decrease success should be described. For mining and chemical control of vegetation, EPA's criteria for toxic materials will need to be followed, except for ammonia, bentazine, and chlorine ("Quality Criteria for Water," EPA 440/5-86-001). How will BMPs be selected or modified to insure compliance with toxic criteria?

Ground water recharge areas are especially susceptible to the rapid transfer of pesticides into the ground water system. Once in this system, their persistence and discharge through springs and seeps forms a threat to other area resources, e.g., wildlife. Clinker or scoria (in coal areas) are typically sites of shallow ground water recharge. The prohibition of pesticide use in recharge areas should be considered in the RMP/EIS.

28 ○ As requested in our scoping letter, the RMPs/EIS should clearly compare the priority of expending funds for vegetation manipulation with the need to fund the basic high priority resource protection activities such as streambank and gully stabilization, resource condition inventories, site-specific management plans, riparian area management, and non-manipulation activities to implement Allotment Management Plans (AMPs). What is the cost of these forage treatments versus the benefits?

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Riparian Areas and Wetlands

29 The BLM objective for all alternatives is to "maintain riparian areas in good or excellent condition and improve those that are being degraded" (page 61). Does this mean that just those areas already in good to excellent condition will be maintained at existing conditions? Also, we suggest a thorough description of how "condition" as a measure of riparian values (not just vegetation condition), relates to the BLM's Riparian Area Management Policy "to achieve a healthy and productive ecological condition for maximum long-term benefits". 2) the riparian values listed in the Policy's background statements; and 3) the Executive Order 11990 and 11990 requirements to preserve, protect, and maintain the natural functions of such areas" (page 23).

30 According to page 46, 1,725 acres of riparian area would be improved in all action alternatives. However, from page 90, 1,701 acres would be improved under Alternatives B and D. Why is the acreage different? Since the existing low grazing EIS area has 3,201 acres of riparian area (page 238), and only 1,701 acres have been improved, what about the other 1,500 acres? It is not clear that all riparian areas will meet the RMP and BLM policy objectives stated in the previous paragraph. This is also confirmed by the preferred alternative intentions to not improve ecological conditions on M and C acreages of allotments ("Proposed Action," page 291). Moreover, the contradicting AMP objectives on page 61, we would like to see the schedule and implementation process for investigating and identifying "opportunities for improving other riparian habitat for fisheries and wildlife outside 117 allotments" (page 70). Also, we ask that the words 292 be informed of the priority areas of treatments so that they can be incorporated into the CAA section 319 nonpoint source management program.

31 The RMP/EIS consistently uses "improve" and "enhance" as the description of effects of planned management on riparian area values. We request that the RMP define what these terms actually mean on the form of riparian systems to be achieved by new and existing allotment plans. The action alternatives rely heavily on grazing systems to "improve" riparian area values. However, the preferred alternative proposes only two allotments where riparian fencing and spring grazing deferment is planned (page 192, 193, 401). Apparently, this spring grazing deferment is planned (page 192, 193, 401). We question the effectiveness would exclude grazing from 5,401 acres. Also, we question the effectiveness of grazing systems as the only means to achieve standards improvement and protection of the multiple riparian values. Consequently, more documentation is requested. Also, we support quicker riparian area improvements than listed on page 292 since research has shown riparian areas to respond rapidly, once corrective measures are applied.

Alternative B shows the Bruce Canyon allotment as needing 13.5 miles of riparian fencing and spring deferment (page 277) yet the preferred alternative would have no fencing, grazing system, or spring deferment indicates a need for allotment (page 291). The fact that riparian areas under one allotment indicates a need for riparian management, it is not clear that the preferred alternative adequately addresses the problem. Any similar apparent inconsistencies with other allotments should be evaluated and expressed.

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33 The surface mining lessee in some areas "will be required to develop a habitat recovery and replacement plan for wildlife habitats" (page 31). For wetlands, it is unclear why other in-use lessees maintain are not included in the mitigation plan. BLM's wetland mitigation policy should be described in the RMP/EIS. For example, EPA recommends mitigation on an acre-for-acre, ecological equivalency basis (in some cases, greater than acre-for-acre mitigation may be needed to achieve ecological equivalency). We also request that the RMP/EIS state the acceptable monopolyses for determining values lost versus values to be achieved in a mitigation plan. What are the monitoring and management requirements?

34 We suggest that the RMP/EIS state the locations and planned schedule for initiating landownership consolidations for improved riparian area and fisheries management, and protection of AGS (pages 90, 120).

Areas of Critical Environmental Concern (ACECs)

35 The comparison of alternatives - table 1 and elsewhere indicates an ACEC management options to allow a "limited use of vehicles on designated" canada rather than protect the areas as required by FLPMA. Another example is the "cumulative adverse effects" of ACECs on other resources and uses of multiple ACEC (page 299). We request a specific description of what will constitute "protection" for each ACEC in order to determine consistency with FLPMA. What are the ACEC protection criteria to be met or "mitigation"? Also, we believe that management plans including "consistency and public reviews are needed for all ACECs; however, it is not clear that such plans are to be done.

Another major concern is that the RMP/EIS alternatives contain different ACEC recommendations. We are not sure that the ACECs should be the same (area and size) for all action alternatives. Either they are or are not valid ACECs under FLPMA regardless of any "balancing" of uses. Management practices may vary by alternative, however, in order to reach the same ACEC protection objectives and requirements under FLPMA requirements to "give priority to the designation and protection of" ACECs (Section 202(c)(3)) is not clear. If areas, other than land mills, where watershed, soils, AGS, wetlands, riparian areas, or numerical water quality concerns were considered, what management requirements will substitute for ACEC designation? We would like to see an approach that describes all potential ACECs recommended by BLM staff or others, reasoning for not recommending any particular area, (if any) in the RMP/EIS, and any special management the areas may need. Watershed/water life related ACECs should be submitted to the State for the Section 319 NPS assessment report.

BLM's approach under the preferred alternative to managing the white pelican colonial nesting islands "do[s] not provide the continued existence of the colony" (page 205). We believe that the islands is a good example of what Congress intended for ACEC protection" as proposed in Alternative B and we recommend RMP/EIS revisions to provide effective protection for the area.

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Monitoring and Evaluation

36 We do not agree with the decision that water quality monitoring plans would not be addressed in the RMP/EIS (page 18). Our scoping comments requested a comprehensive monitoring program (not plans for each activity) in an RMP/EIS appendix or monitoring chapter. The monitoring program should include such information as: (1) goals and objectives, (2) types of surveys (ambient, intensive) or assessments to be used, (3) parameters to be monitored, (4) management and environmental indicators, acoustic monitor, sediment delivery), (5) monitoring methodologies, (6) mechanisms for monitoring implementation and adequacy of best management practices, (7) the person/position responsible for monitoring, and (8) the feedback loop to achieve timely modifications to activities. Refer to the scoping letter for other components. It would provide the specific framework for Clean Water Act monitoring (including 303(d)beneficial uses) in the Resource Area. Groundwater monitoring should also be included. The other agencies and public need to review and comment on this framework in the RMP/EIS. The RMP direction would then be applied in site-specific detail. The monitoring program would also help meet 43 CFR Part 1610.4-9 requirements that the "proposed plan" establish "intervals and standards" that "shall provide for evaluation to determine whether mitigation measures are satisfactory". As examples, activities on BLM land would be monitored to ensure that they comply with applicable Federal and state standards for air and water quality" (page 123), and rangeland monitoring would include water quality monitoring as needed (page 161). However, there is no assurance that the monitoring frameworks has been established for determining WQS compliance or to meet CWA objectives. The framework would also apply for evaluating/reporting adequacy of the 85 miles of "intact stream habitat" management under the CWA and FLPMA. What is the early warning system to document existing violations or risk of potential violations of the CWA? An example is the Little Snake River basin (except Muddy Creek) where intensive monitoring "would be implemented . . . as problems were identified" (page 61). How would the problems be identified?

37 BLM includes a commendable requirement that lessees for certain coal leasing areas submit "A plan for monitoring surface water and groundwater conditions" (page 215). State WQS would need "where applicable". However, WQS are applicable on all State waters. What is the CWA monitoring framework BLM-directioned that will be used by lessees to develop adequate monitoring plans? CWA compliance monitoring should be part of the timber program operating procedures, when applicable; however, it is not mentioned under monitoring on page 332.

Wilderness Supplement

38 It appears from the discussion that the Encampment River Canyon and Everett Roadless Wilderness Study Areas (WSAs) have the appropriate wilderness characteristics and will be recommended for wilderness per Section 603 of FLPMA. Consequently, we are asking BLM to clarify why it did not recommend the WSAs as wilderness, and why the reasons are not in the Supplement.

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38 There are several concerns regarding riparian area management in the Encampment River Canyon WSA. The on-going heavy impacts to the riparian areas discussed on pages 29, 30, 39 and elsewhere appear to invoke FLPMA's requirement "to take any action required to prevent unnecessary or undue degradation of the lands and their resources or to afford a greater degree of protection to protect wilderness suitability (Section 603(c)). It is unclear why appropriate control measures have not been taken. Further clearing is planned to determine whether any "habitat degradation is occurring" (page 17) or whether any "adjustments to livestock use" are needed (page 30). However, the discussion indicates ample knowledge of current riparian/streambank conditions as a basis for quick corrective action. About 50 of the 113 acres of riparian area would be excluded from cattle grazing in order to provide nesting sites in the stream/streamside alternative for certain birds. For the remaining acres and alternative, the Supplement should identify the specific objectives for protection of the multiple riparian resources present. The entire riparian area should be addressed in a revision of the existing habitat management plan. Under a wilderness recommendation, what are the management issues to be addressed by the wilderness management plan? The Supplement should say that no improvement in aquatic life or habitat is expected under wilderness management. However, it is not clear that such improvements could be achieved with a good riparian management program.

Other Concerns

39 The water quality-related coordination and consultation with other government agencies should be described in an implementation chapter or appendix. We suggest particular Federal/State inter-agency efforts called by BLM as part of a continuing coordination strategy. Under the current memorandum of agreement (MOA) between BLM and Wyoming DEQ, the DEQ prepares a biennial Clean Water Act Section 205(j) water quality assessment that identifies stream segments with significant WQS impairments, and those segments where a "high potential exists for significant impairment due to present and/or anticipated activities affecting runoff from lands managed and under the jurisdiction of BLM." The MOA also calls for an "Annual Meeting and Agreement Review" in order to address goals and priorities, and to "determine programming of coinciding allocations in the respective work plans and budgets of both agencies." We request that an RMP/EIS implementation chapter or appendix recognize the MOA, action taken in response to existing/potential impairments identified in the 205(j) assessment, Medicine Bow-Divide Resource Area contributions to the assessment, planned input to the State 319 WQ assessment and plan, and coordination activities under the MOA. The RMP should identify procedures that will be used to ensure consistency with water quality management plans for the area that have been completed by the State.

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13

40 The new Clean Water Act amendments were passed in February 1987. A primary concern is the new 319 control program (Section 319). BLM cannot watch other Federal (FLPMA) dollars, but allottees, private land owners, and private organizations can and do plan to participate in the program. Some of this work may be done on BLM lands. How will BLM participate in work on mixed-ownership watersheds to improve water quality? BLM is asked to provide an assessment of condition of their water bodies to the State as part of the assessment phase of the 319 program. Additionally, the State will be identifying in it's 319 management program the Federal programs/impacts that it plans to review under Executive Order 12372 for consistency with the State's WQ management program (refer to Section 319 of the new Amendments). BLM involvement in this process should be described.

41 We suggest that an implementation schedule list the specific inventories, assessments, and management plans to be done in priority order along with the targeted schedule for completion. Of particular concern to EPA is have included over: eight activity/site assessments; watershed and riparian management plans; salinity control plans; conservative management plans; wetland and riparian area inventory and management plans; groundwater studies; and air quality studies. We recommend that the alternative line item budgets and implementation schedule refer to the draft San Juan RMP/EIS, Utah; be included in an implementation chapter or appendix. What is the lineage of the budgeting process to implementation of RMP-identified projects?

42 Extensive site-specific project planning and impact analysis/disclosure will be done under this broad RMP/EIS. We believe that there will be a continuing need for public and other agency involvement in planning some of these projects (rather than just having the analyses available in the BLM offices). The strategy for this involvement should be addressed in more detail in an implementation chapter or appendix.

115P

FOLLOW AND PROCEDURES 1640

"Review of Federal Actions Impacting the Environment," EPA, Office of Federal Activities, Washington, D.C., October 3, 1984.

SUMMARY OF RATING DEFINITIONS
AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO=Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosure opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC=Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO=Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU=Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. The proposal should not proceed in its present form. The alternatives, or a new alternative. If the potential unsatisfactory impacts are not corrected at the final stage, EPA might refer the matter to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1=Adequate
EPA believes that the EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the action, and those reasonably available to the action sufficient to fully assess the environmental impact. Any minor suggestions will be discussed with the lead agency or incorporated in the text of the EIS.

Category 2=Insufficient Information
The draft EIS does not adequately assess potentially significant environmental issues that should be avoided in order to fully protect the environment, or the reviewer has requested more information and analysis of alternatives. The reviewer may suggest the addition of other alternatives or information.

Category 3=Inadequate
EPA believes that the draft EIS inadequately assesses potentially significant environmental issues of the action, or the reviewer has identified new reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to protect the environment. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in another draft document. EPA would like to work with the lead agency to reduce these inadequacies. This proposal could be a candidate for referral to the CEQ.

Responses to Letter 115

Introductory Response. The suggestions made in this letter are well received and have been incorporated as appropriate. Many of the concerns raised in the letter have been addressed in the general responses; in particular, the following general responses apply: 2 (planning tiers), 3 (EIS content), 4 (assumptions and proposed management actions), 5 (monitoring), 6 (ecological range condition), and 7 (riparian vegetation).

Portions of this letter seem to convey some confusion as to the purpose of our planning criteria. Planning criteria are not management prescriptions or proposed management actions. They serve to focus our planning effort on the issues, but the plan is not limited to addressing only those aspects specifically covered in the criteria.

In addition, some confusion is evident regarding the RMP objectives. Objectives of the alternative plans appear in table 1 of chapter 2 of the draft RMP/EIS. The objectives of the proposed RMP are included under "The Proposed Plan" in chapter 2 of this document. Analysis and assumptions in other parts of the document should not be confused with objectives.

The BLM will comply with all applicable laws, regulations, and policies in implementation of the RMP. This includes compliance with the Clean Water Act (CWA) and FLPMA.

1. Table 8 on page 140 of the draft RMP/EIS presents water quality standards for Wyoming and identifies standards that pertain to particular uses.

2. As we mentioned in the introductory response, the BLM will comply with all applicable laws, regulations, and policies.

   When they are needed, watershed management plans will be developed during activity planning. Watershed management is a recurring concern in this letter. The BLM will coordinate with the regional office of the EPA in development of our watershed management plans. This process will begin after approval of the RMP. Consideration of watershed conditions will not be limited only to certain areas.

   With *any* surface-disturbing activity, there is a potential for localized degradation of water quality through increased soil erosion. This could be from an activity as seemingly innocuous as a group trail ride that compacts soils along a trail or from activities such as timber sales that remove substantial amounts of vegetation from harvested areas. The soils, water, and air objectives of the RMP will be achieved.

   Reducing "degradation of water quality" in "I" category allotments can only be viewed as an *improvement* in water quality over existing conditions.

3. The section on page 280 of the draft RMP/EIS to which you refer deals with the effects of management actions for minerals under Alternative C, specifically the actions for oil and gas. The paragraph in question is under "Effects on *Wildlife and Fisheries* (emphasis added), and it indicates that *under Alternative C*, "The absence of surface protection restrictions . . . could result in adverse effects on big game and sage grouse habitat, waterfowl, beaver, and a variety of other *wildlife species associated with* open waters and riparian areas." Those adverse effects are the ones that "could be highly detrimental," depending on the extent of oil and gas development.

   The effects of minerals actions on soils, water, and air (again, under Alternative C, not the preferred alternative) are described on pages 272 and 273 of the draft document.

   For a description of the effects of oil and gas actions under the proposed plan, see chapter 4 of this proposed RMP/final EIS under "Effects on Soils, Water, and Air," subheadings "Minerals Actions," "Leasable Minerals," "Oil and Gas."

   The BLM follows and enforces federal regulations and applies surface protection requirements as necessary to protect water quality. If violations of CWA or FLPMA quality standards were to occur, it would be due to noncompliance with the regulations and restrictions. Also please see general response 2.

4. The section to which you refer is part of table 2, "Comparative Summary of Cumulative Impacts," which presents side-by-side comparisons of impacts of the different alternatives. It is not a statement of management prescriptions or proposed management actions. The acreage you list is acreage where *wildlife habitat management* actions also would benefit watershed values.

   The critical watersheds have been identified as needing management above and beyond the standard management practices that are regularly used to address watershed problems. Important watersheds can be any that have other important resource values such as wildlife habitat, riparian areas, and fisheries.

   The general practices listed on page 465 in the draft RMP/EIS are practices that can be used in addition to the Wyoming BLM standard mitigation guidelines. Application of the Wyoming BLM standard mitigation guidelines appears to be adequate in areas outside the critical watersheds.

5. Please see general response 3. The potential effects of seepage from unlined brine pits are analyzed during the review of APDs, and appropriate mitigation is prescribed at that time. Lined pits are required by regulation if produced water volume exceeds five barrels per day or if water quality standards are exceeded.

6. Please see the response to comment 2 of this letter. Also see general response 2.

   "Positive effect" could include a reduction in the rate of habitat degradation, as you point out. "Positive effect" is intended to indicate an obvious improvement over an existing situation (such as improved bank condition or a reduced rate of sedimentation). It should be mentioned that improving one or even several habitat components may not actually improve the condition for fish if the limiting factor is another component such as amount of pool habitat.

   The WGFD strategic plan does not set fish population goals; therefore, it is somewhat limited in utility for setting habitat management objectives.

7. All open water habitats are high priority habitats, and all fish habitat is high priority habitat. There are no "unimportant" streams. The high priority habitats listed in table 23 in the draft RMP/EIS and table 4 in this final document include open water habitats.

8. The list of potential effects to be mitigated is intended as an example, not as an all-inclusive list. Site-specific mitigation will be developed during the hydrologic study. It will be guided by the points listed under "Groundwater and Surface Water Resources" in the Coal appendix to this document. Operating requirements would be established if the monitoring plans indicated that water quality standards could potentially be violated. Through agreement with OSMRE, the Wyoming DEQ would be responsible for enforcement after mine operations were initiated.

9. The *Amendment to the Hanna Basin Management Framework Plan and Draft Environmental Assessment* (USDI, BLM and GS 1984) which was prepared for federal bypass coal lease W-82736 in 1984, contains more detail on mitigation to protect Seminoe Reservoir and associated downstream uses. That document (which is listed in the References for this proposed RMP/final EIS) also

contains a discussion of potential effects on the aquatic biology of Seminoe Reservoir.

10. Please see general response 2. The RMP/EIS does not address the study you mentioned, which is being carried out in the Casper District, BLM. Casper District personnel indicate that sediment yields are low in the headwaters. The problem seems to exist where alluvial valleys are being irrigated, not on grazing lands.

11. Please see the introductory response to this letter. Regardless of the allotment category, management actions may be taken to improve vegetation condition and to address small problem areas. In some cases, site-specific problems identified during categorization did not warrant placing an allotment in the "I" category.

    The allotment categorization process is intended to help us establish priorities for addressing problem areas. An increase in rates of erosion could occur in some allotments during the life of this plan. Some level of monitoring will be completed in all allotments, and actions will be taken if water quality problems are found to exceed acceptable standards. If soil productivity is found to be declining, actions will be taken to correct the situation.

12. If an activity that would affect these watersheds is proposed on public lands, the BLM will analyze the proposal and apply mitigating measures adequate to ensure that the quality of the watershed would be preserved.

13. The draft RMP/EIS does not say that water and air quality standards would be exceeded. Effects on water and air quality are analyzed for all timber sales in site-specific environmental analyses.

14. The excerpt from page 92 to which you refer would be more accurate if it read "reduce accelerated erosion . . ." Also please see general response 2 and the response to comment 2 of this letter.

    Where practical, accelerated erosion should be prevented. However, preventing all accelerated erosion would require disallowing all surface-disturbing activities. Any time the surface is disturbed, accelerated erosion occurs. Management should strive to keep it within tolerable levels.

    Soils differ in the amount of erosion they can tolerate. Accelerated erosion may have little effect on soil productivity or water quality if it is below the tolerance level. The SCS soil tolerance ratings are being updated to reflect rangeland conditions.

    Over a planning areas as large and variable as this one, each situation that is encountered is unique, and objectives and solutions to problems are addressed during site-specific activity planning.

15. Please see the response to comment 2 of this letter.

16. Please see general response 3.

17. The excerpt to which you refer was not intended to give the impression that injection activities are not regulated. However, the Wyoming DEQ recognizes the activity as a potential source of groundwater pollution.

18. Please see general response 3.

19. Please see the response to comment 5 of this letter.

20. Please see the response to comment 2 of letter 18.

21. Please see the introductory response to this letter, the response to comment 2 of this letter, and general response 3.

22. Please see the introductory response to this letter and general responses 4 and 6. The balance referred to is not a cost/benefit balance, but a balance between the objectives of the different alternatives considered.

23. Rest or deferment is a normal consideration in AMP development, so spring deferment is not listed as a management action for "I" category allotments where AMPs would be developed. The standard to be achieved by AMPs is to provide the key management species with a period of uninhibited growth. As we said under "Grazing Treatments" on page 376 of the draft document, the absence of livestock grazing during the critical growth period gives the plants an opportunity to increase in density, composition, vigor, and production.

24. Please see general responses 4 and 6.

25. Please see general response 3 and the response to comment 49 of letter 103.

26. Please see general response 3. Effects on warm water fishes are not expected to occur. Warm water fishes are important components of aquatic ecosystems, but they are sufficiently adaptable to remain unaffected by any actions proposed in the RMP.

27. A site-specific environmental analysis would be conducted on each project proposal. This is a part of the activity planning tier, which is described in general response 2. The standards of the EPA and the state of Wyoming would be considered, along with BLM guidelines and any other pertinent information available at that time. The need for and extent of rest following treatment also would be determined during site-specific analysis.

28. Vegetation manipulation will be accomplished within the context of site-specific management plans (activity plans) such as AMPs, HMPs, and watershed management plans. You have identified such practices as "basic high priority resource protection activities." Other activities such as stream bank and gully stabilization, resource condition inventories, riparian area management, and activities to implement AMPs also would be carried out in the context of the activity plans. Before AMPs are implemented, a benefit/cost analysis would be prepared for the proposed range improvements. Those in which the costs would be greater than the benefits would not be implemented.

29. Please see general response 7 and the response to comment 6 of letter 98. Although some riparian areas might be maintained in a condition other than good or excellent (as defined in the *National Range Handbook* of the SCS) to meet another resource management objective, our overall objective is to improve condition class in riparian areas.

30. Please see general response 7. The acreage difference is due to the projected additional acreage around existing reservoirs that would be improved under alternatives B and D. See page 258 of the draft RMP/EIS.

31. Please see general response 2. Investigation of opportunities for improving other riparian habitat outside of "I" allotments would be an ongoing process.

32. Improvement or enhancement of riparian areas is movement toward a higher level of value or desiraoility. This may be measured by a number of methods, including ecological condition, stream bank and channel stability, suspended sediment sampling, water quality, riparian community classification, and benthic macroinvertebrates composition and diversity.

    Grazing management systems with their associated range improvements are the principal tools available to improve the condition of the vegetative resource, both upland and riparian. Fencing to exclude livestock is but one component of grazing management.

    Livestock grazing is a compatible use in riparian areas when properly managed. However, exclusion of livestock grazing may be necessary for a period of time sufficient to achieve a level of recovery and stability which can support grazing while meeting management objectives. The

BLM has released a *Draft Technical Reference on Grazing Management in Riparian Areas*, which addresses these concerns (USDI, BLM 1987).

Corrections for table LVGR-AP-4 appear in the Livestock Grazing appendix to this proposed RMP/final EIS.

33. In addition to the habitat recovery and replacement plan, mitigation requirements such as a hydrologic mitigation study on coal areas will be developed in activity planning as appropriate. The monitoring and management requirements will be developed specifically for each coal tract site.

34. Please see general response 2. Landownership consolidations to benefit wildlife habitat management, public recreation opportunities, and forest management will be pursued as opportunities arise.

35. The proposed plan contains a discussion of management direction and intent for all areas considered for ACEC designation and the rationales for selection of certain areas to be proposed for ACEC designation. Activity plans will be completed for ACECs as necessary after approval of the RMP.

36. Please see general responses 2 and 5.

37. Please see general response 2 and the response to comment 33 of this letter.

38. Please see general response 1.

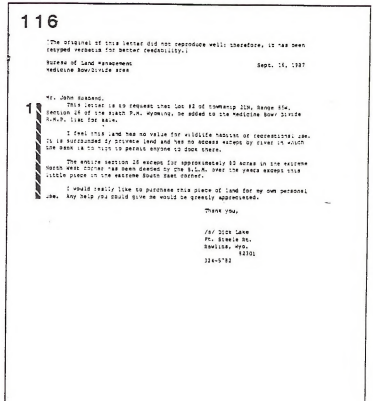
39. The consultation and coordination will continue. The BLM submits data to the Wyoming DEQ and helps to identify concerns for the water quality assessment.

40. We will coordinate with other entities as activities under the NPS control program are identified. The BLM submits data about the condition of water bodies on public land to the Wyoming DEQ for the water quality assessment. Concerns and actions taken are addressed in the water quality assessment.

41. Please see general response 2. Available budgets will be allocated to accomplishing RMP objectives according to priorities established during activity planning.

42. Activity planning and associated environmental analysis will be conducted in public view. The BLM will actively solicit the involvement of other agencies and the public. This is a continuing process in the BLM.

116



The original of this letter did not reproduce well; therefore, it was been retyped verbatim for better readability.)

Bureau of Land Management
Rawlins Bow/Divide Area

Sept. 14, 1987

Mr. John Russell,

1 This letter is to request that Lot #2 of township 21N, Range 91W, Section 19 of the Sixth P.M. Wyoming, be added to the Rawlins Bow Divide R.M.P. list for sale.

I feel this land has no value for wildlife habitat or recreational use. It is surrounded by private land and has no access except by river it which the bank is so high is permit anyone to pass there.

The entire section 19 encomp for approximately 53 acres in the extreme north west corner has been deeded by the B.L.M. over the years except this little piece in the extreme South East corner.

I would really like to purchase this piece of land for my own personal use. Any help you could give me would be greatly appreciated.

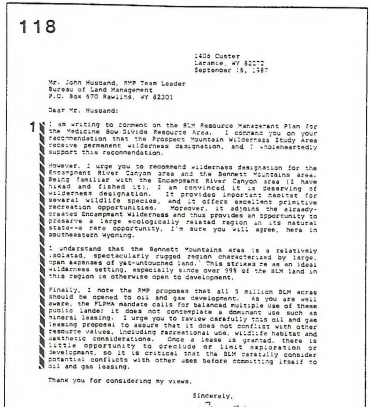
Thank you,

/s/ Dick Lake
Ft. Steele St.
Rawlins, Wyo.
82301

324-5782

Response to Letter 116

1. The lot to which you refer will be included in the list of lands to be considered for disposal under the proposed plan. Before taking any disposal action, the BLM would give individual consideration to each tract, including public involvement. The criteria for disposals described on page 335 of the draft RMP/EIS also would be considered.



118

2408 Custer
Laramie, WY 82072
September 18, 1987

Mr. John Husband, RMP Team Leader
Bureau of Land Management
P.O. Box 670 Rawlins, WY 82301

Dear Mr. Husband:

1 I am writing to comment on the BLM Resource Management Plan for the Medicine Bow Divide Resource Area. I contact you on your recommendation that the Prospect Mountain Wilderness Study Area receive permanent wilderness designation, and I wholeheartedly support this recommendation.

However, I urge you to recommend wilderness designation for the Encampment River Canyon area and the Bennett Mountains area. Being familiar with the Encampment River Canyon area (I have hiked and fished it), I am convinced it is deserving of wilderness designation. It provides important habitat for several wildlife species, and it offers excellent primitive recreation opportunities. Moreover, it adjoins the already-created Encampment Wilderness and thus provides an opportunity to preserve a large ecologically related region in its natural state--a rare opportunity, I'm sure you will agree, here in southeastern Wyoming.

I understand that the Bennett Mountains area is a relatively isolated, spectacularly rugged region characterized by large, open expanses of yet-untouched land. This strikes me as an ideal wilderness setting, especially since over 99% of the BLM land in this region is otherwise open to development.

Finally, I note the RMP proposes that all 5 million BLM acres should be opened to oil and gas development. As you are well aware, the FLPMA mandate calls for balanced multiple use of these public lands; it does not contemplate a dominant use such as mineral leasing. I urge you to review carefully this oil and gas leasing proposal to assure that it does not conflict with other resource values, including recreational use, wildlife habitat and aesthetic considerations. Once a lease is granted, there is little opportunity to preclude or limit exploration or development. So it is critical that the BLM carefully consider potential conflicts with other uses before committing itself to oil and gas leasing.

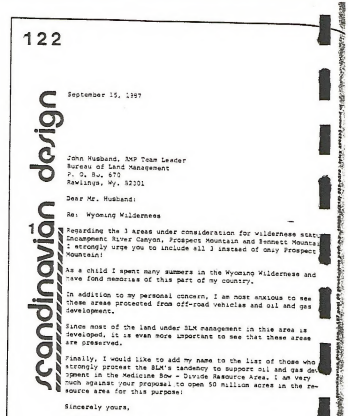
Thank you for considering my views.

Sincerely,

Robert B. Keiter

Response to Letter 118

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Please see general response 1.



122

scandinavian design

September 15, 1987

John Husband, RMP Team Leader
Bureau of Land Management
P. O. Box 670
Rawlings, Wy. 82301

Dear Mr. Husband:

Re: Wyoming Wilderness

1 Regarding the 3 areas under consideration for wilderness stat Encampment River Canyon, Prospect Mountain and Bennett Mounta I strongly urge you to include all 3 instead of only Prospect Mountain!

As a child I spent many summers in the Wyoming Wilderness and have fond memories of this part of my country.

In addition to my personal concern, I am most anxious to see these areas protected from off-road vehicles and oil and gas development.

Since most of the land under BLM management in this area is developed, it is even more important to see that these areas are preserved.

Finally, I would like to add my name to the list of those who strongly protest the BLM's tendency to support oil and gas dev opment in the Medicine Bow - Divide Resource Area. I am very much against your proposal to open 50 million acres in the re source area for this purpose!

Sincerely yours,

SCANDINAVIAN DESIGN, INC.

Celia Livingston, President

Response to Letter 122

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Please see general response 1.

932 S. Clearview
Parkway #627
Harahan, LA. 70123
September 14, 1987

John Husband, RMP Team Leader
Bureau of Land Management
P.O. Box 670
Rawlins, WY. 82301

Dear Mr. Husband,

As a member of the Sierra Club I am writing to you to declare my support of permanent wilderness status for three areas within the Medicine Bow/Divide Resource Area. Those areas are: 1)Encampment River Canyon, 2)Prospect Mountain and 3)Bennett Mountains. Myself and my fellow Sierrans feel that these areas should be permanently protected from oil and gas development, logging and mining.

These three areas are very important to all americans, because in their wildlife rich, pristine atmosphere they allow hikers and animals alike the opportunity to partake in their undisturbed open spaces, isolation and peacefulness. To mention their individual beauties: first Encampment River has been proposed by the BLM as a national natural landmark, second Prospect Mountain is crucial winter range for the Snowy Range elk herd, and third Bennett Mountains is a remote area whose isolation would be deeply disturbed should ORV use be allowed. I would like to point out that 99.7% of the BLM land in this area is already roaded or otherwise developed. This protection is important to me because I feel that the delicate balance between the environment and development will be upset if these areas are released for oil and gas development. My parents have traveled frequently to that part of wyoming, and have plans to return because of the natural beauties that they have been able to enjoy during their trips.

I would like to bring to your attention the fact that the BLM has shown a bias toward oil and gas development in the Medicine Bow/Divide Resource Area. The BLM proposes to open the entire 20 million acres in the resource area, with the exception of a single wilderness recommendation of Prospect Mountain. The BLM should reevaluate its policies so that oil and gas development are not always the main considerations in this part of Wyoming.

Please consider my appeal as you make the decision about wilderness designation for this important area in the next few days. Thank you for attention.

Sincerely,
Tim Regan Schaefer
TR Schaefer

Response to Letter 126

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Please see general response 1.

127A

PETROLEUM ASSOCIATION OF WYOMING
A division of Rocky Mountain Oil and Gas Association

951 Warner Court, Suite 108
Casper, Wyoming 82601
(307) 234-5333

Richard T. Pedrotzki
Executive Director
Wayne W. Prewett
Associate Director

September 17, 1987

Mr. John Husband
Bureau of Land Management
Rawlins District Office
P.O. Box 670
Rawlins, Wyoming 82301

Dear Mr. Husband:

On behalf of the Petroleum Association of Wyoming, a division of the Rocky Mountain Oil and Gas Association whose members account for more than 90% of the oil and gas exploration and production in Wyoming, please accept the following comments on the Medicine Bow-Divide Draft Resource Management Plan and Environmental Impact Statement.

1 The resource area contains millions of acres of highly valuable oil and gas lands. It is imperative that the BLM consider this potential when formulating land management planning decisions. It is important upon the BLM to identify lands having significant energy potential and preserve actions which would open or maintain access for exploration and development, while meeting minimum legal standards for environmental protection. We recommend the BLM reexamine the concept of minimal restrictions on Known Geologic Structure (KGS) lands, and incorporate a modified level of management into the final approved plan.

FAW supports the adoption of Alternative C. This alternative would emphasize leasing, and exploration and development of oil and gas in KGS areas through placement of minimal restrictions on surface-disturbing activities (i.e., 3% slope (i.e., Lander Resource Area), and we believe that a feasible alternative for this area as well. A level of management for oil and high potential lands less restrictive than proposed in the Preferred Alternative (Alternative D) would allow BLM to make appropriate trade-off decisions based upon the capability of the land to produce oil and gas. Threatened or endangered species, migratory birds, significant Cultural/natural history resources would continue to be adequately protected.

2 The proposal to designate the Washakie Basin National Natural Landmark (NNL) is a cause for concern. The brief discussion of NNL's does not fully explain the ramifications of designation. We cannot support the proposal to create

127B

951 Warner Court, Suite 108
Casper, Wyoming 82601

Mr. John Husband
September 17, 1987
Page 2

2 yet another layer of restriction in an area which includes a major portion of the Washakie Basin Field Known Geologic Structure. Industry is not opposed to mitigating adverse impacts on cultural and historic values, but they should not be afforded priority consideration over oil and gas resources in a KGS.

3 The statement on page 145 regarding use of groundwater, "the energy industry in wyoming uses groundwater for power generation, oil recovery, and uranium mining and processing. The petroleum industry is the largest user of industrial groundwater in Wyoming...it uses almost two thirds of the total.", needs clarification. There is a distinction between using and producing. The vast majority of water associated with petroleum related activities is not consumed.

Rather, it is produced with the oil and gas resource and then through a permitted process reinjected. Further explanation is necessary to avoid any misconceptions about water usage.

4 We take exception to a blatantly incorrect statement quoted on page 152 from the Wyoming 1986 Water Quality Assessment. "Injection wells...provide a potentially great threat to the deeper aquifers. Local deterioration of nearby drinking water is always a possibility when underground injection is being considered. Improper well completion is a common cause of drinking water aquifer contamination near injection operations."

This accusation is not substantiated by any evidence in the referenced document. We urge the BLM to make further investigation into this misstatement and remove its reference from the plan. The document comes to the conclusion that "Locally, groundwater has been contaminated by leaking brine pits and oil field holding ponds", p. 153. We question the validity of these statements and request they be documented or deleted. It is reference such as these that lead to general misconceptions of impacts upon resources by oil and gas operations. The Wyoming Oil and Gas Conservation Commission is the lead permitting agency in the state for oil field disposal pits and underground injection control wells. We urge the BLM to consult with the Commission to correctly characterize these operations.

5 There is some confusion created by the listing of ACEC's under the description of no surface occupancy (NSO)in the Standard Protection Requirements Appendix, p. A71. The draft plan indicates the proposed ACEC's in the Medicine Bow-Divide Resource Area will be managed in accordance with standard protection requirements, not NSO. This discrepancy should be clarified.

In addition, we are concerned over the explanation of the new stipulation which indicates that all exceptions may only be made through a land use plan amendment. This is significantly different than the final Wyoming stipulations received from the State BLM office which allows for non waiver by the State Director or through a land use plan amendment.

6 The draft plan does provide acreage figures for lands subject to seasonal

127C

951 Werner Court, Suite 100
Casper, Wyoming 82601

Mr. John Rusbend
September 27, 1987
Page 3

6 restrictions and surface disturbance restrictions, but these lands should be identified on a map. By portraying on an aerospace map indicating where overlap of restrictions occur, a comparison can be made with regard to mineral potential and proposed constraints.

We appreciate the opportunity to comment.

Sincerely,

Wendy K. Russell

cc: Hillary Oden
Doug Dow
Mike Castleberry
Brad Fenn
Alice Santee

128A

United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
655 Parfet Street
P.O. Box 25287
Denver, Colorado 80225-0287

L7619 (RMR-PP)

SEP 1 1987

Memorandum

To: John Russend, Team Leader, Rawlins District, Bureau of Land Management, Rawlins, Wyoming

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Comments on the Resource Management Plan/Draft Environmental Impact Statement (RMP/DEIS) for the Medicine Bow-Divide Resource Areas, Albany, Carbon, Laramie, and Sweetwater Counties, Wyoming (TES-87/0016)

As we reviewed the subject RMP/DEIS, we were impressed by the careful deliberation of alternatives, which successfully evolved over-refining of possibilities. Because of this approach, it was easier to follow the Bureau of Land Management's (BLM) rationale for its selection of Alternative 3 as the preferred alternative.

In general, the preferred alternative presents an acceptable trade-off between the various resource management actions expected in BLM-administered areas. While we may have favored more protective actions in some respects--e.g., only one of the wilderness study areas, Prospect Mountain, is recommended for wilderness designation (page 61 of the wilderness Supplement)--the general impression is that Alternative 3 is a balanced approach to management of the two resource areas. We do, however, have some specific recommendations for changes in the preferred alternative.

1 The Como Bluff National Natural Landmark (NNL) is famous for its paleontological resources. Alternative 3 would reinforce BLM's responsibilities toward the NNL by not for designation as an Area of Critical Environmental Concern (ACEC, see page 2). Nevertheless, Alternative 3 leaves open the possibility of mineral developments in the NNL we therefore that this could be done without irreparable damage to the paleontological resources there.

2 The considerable significance of White Pelican Island is discussed on page 117 of the RMP/DEIS. Later, under Environmental Consequences we note that if ". . . disturbance were having a detrimental effect on the nesting colony, actions would be implemented to protect the colony . . ." Yet, further (page 118) is the statement that "If protective actions were not implemented until effects were evident from monitoring data, disturbance thresholds could be surpassed. This could jeopardize the continued existence of the colony."

Responses to Letter 127

1. Please see the response to comment 1 of letter 93.
2. Please see the response to comment 3 of letter 112.
3. Please see the response to comment 6 of letter 112.
4. Please see the response to comment 7 of letter 112.
5. Please see the responses to comments 2 and 3 of letter 93 and the response to comment 4 of letter 112.
6. Please see the response to comment 2 of letter 93.

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2

2 Given the apparently low potential for mineral development on the island, we believe the preferred alternative should recommend the entire island as an ACEC, with no provision for mineral development, rather than risking the existence of this major white pelican nesting colony.

3 The Wyoming toad (Bufo hemiophrys baxteri), an endangered subspecies, is totally mentioned on page 108. We suggest that the preferred alternative recommend a survey of the resource areas in places with suitable habitat for this toad, and include provision for protection of any as-yet-undiscovered populations.

4 The RMP/DEIS contains a good discussion of the various NNL's in the resource areas. Please delete the reference to "scenic values" for the Red Creek NNL (page 106); geological or ecological features of national significance are the criteria for designation (as correctly stated on page 2). As a general practice, it would be desirable to have all proposed and designated NNL's identified also as ACEC's.

5 On page 128 of the RMP/DEIS is the statement that "The North Platte River is the most important resource for water-based recreation in the planning area." We also noted that the preferred alternative would continue to list the river as a Special Recreation Management Area, with a 1/4-mile corridor on each side ". . . to maintain the quality of the visual resources." We would like to see added to this a statement that the corridor would be excluded from mineral entry.

Thank you for considering our comments. We look forward to receipt of the Record of Decision for the RMP/DEIS.

Richard A. Strait

Responses to Letter 128

1. Please see the response to comment 5 of letter 102.

2. The draft RMP/EIS incorrectly implied that the White Pelican island would be available for mineral location. However, since the island is Bureau of Reclamation acquired land, it is not available for mineral activities.

3. Recent surveys conducted by the USFWS and the University of Wyoming in the Laramie Basin have resulted in the discovery of two populations of Wyoming toad. Surveys will continue to be conducted regardless of the RMP alternative selected. The BLM is committed to the conservation and enhancement of all endangered species and their habitat.

4. Thank you for pointing out our error. In chapter 2 of this document, the proposed plan contains a discussion of the criteria that an area must meet to be considered for ACEC designation. The proposed and designated NNLs do not all meet these criteria. However, management direction in the proposed plan provides that the integrity of the natural history values of the areas would be maintained.

5. Mineral withdrawals are placed on areas with important values that cannot be adequately protected by other means. Our authority to manage surface disturbance associated with mineral exploration and development is sufficient to maintain the visual quality along the North Platte River. The potential for mineral locations along the river (other than sand and gravel operations) is low in most stretches and moderate in some, which means that the likelihood of mineral operations negatively affecting recreation resources is not great. Regulations in 43 CFR 3809 allow us to protect valuable resources from unnecessary damage due to mineral activities. Mineral developments also are regulated by state law. Also please see general response 10.

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WYOMING CHAPTER
SIERRA CLUB

September 16, 1987

Mr. John Husband, Team Leader
Bureau of Land Management
Rawlins District
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Husband,

The Wyoming Chapter of the Sierra Club has 600 members who frequently use BLM lands for recreation and nature study. We submit the following comments on the draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the Medicine Bow/Divide Resource Areas. These comments fall into two categories, those concerning the adequacy of the documents and those critiquing the proposed Plan.

The Planning Documents

We are pleased by the quality of the documents. The typesetting is crisp, the tables well-organized, and the graphics excellent. The prose is mostly in plain English, although more could be done to improve readability for the general public. A great deal of information is presented, but the judicious use of tables, figures, and maps has prevented overburdening of the documents with excess verbiage. These attributes have greatly helped us in our analysis of the documents. However, there is room for improvement:

1 Purpose and Need

Chapter 1 needs to be rewritten to make it clear how BLM planning is mandated by the Federal Land Planning and Management Act (FLPMA) and how, since planning is a major Federal action affecting the environment, it falls under the aegis of the National Environmental Policy Act (NEPA). Furthermore, we think it would enhance your credibility if you stated up front your management philosophy.

Alternatives

Table 1 should include biological diversity (both plants and animals) and miles of local, collector, and Arterial road construction and (separately) reconstruction. You need to indicate how much timber will be harvested (MMBF) and how much forest land will be subject to different kinds of silviculture (clearcutting, shelterwood, thinning, etc.). Acres of wilderness should also be given.

The map following Tesla 1 are well-done but somewhat confusing because some apply to specific alternatives while others apparently apply to all alternatives. This difference

"Not blind opposition to progress, but opposition to blind progress."

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1 needs to be made clear in the captions. We also suggest a set of simple bar graphs comparing the four alternatives in terms of various resource uses, e.g., grazing AUM's, acres open to mineral exploration, wildlife habitat acres, etc. Table 3 (Cumulative Impacts) should be moved to the Environmental Consequences chapter (see below).

Affected Environment

This chapter is very thorough on all resources except grazing. The latter section must be greatly expanded so that its coverage is commensurate with the importance of grazing in the planning area. Meaded are bar graphs showing the cumulative acreages in the various ecological condition classes and their trends, and a map showing where areas in each ecological condition class are located.

Maps 5 to 7 and 38 don't seem necessary, while a map of surficial geology would complement the soils map. Figures 6 to 11, while interesting, more appropriately belong in an appendix.

Environmental Consequences

We suggest a reorganization of this chapter to bring out more clearly which types of activities have the greatest potential for environmental effects. As it stands, the chapter is organized with alternatives as major sections and effects on individual resources as subheadings within those sections. It would be better if resources were the sections and alternatives the subheadings.

Effects of grazing are grossly underplayed. Quantitative estimates of soil, water, and vegetation impacts of current and projected grazing levels are needed.

The list of resources should be expanded to include roads and biological diversity. A final cumulative impacts section, including Table 3, would tie together this chapter and indicate which activities in combination assert a larger effect then is apparent when they are discussed in isolation.

The Cumulative Impacts table is preferable to a narrative, but it needs improvement. Quantitative predictions of net forest growth and long-term sustained yield would convey more information than "Productivity would increase with time." Quantitative predictions of changes in range condition and trend are also needed. Projections of visitation rates for primitive recreation demand are desirable. Expected changes in species composition of the various vegetation types should be presented. Hard numbers are needed in place of qualitative statements for wildlife and fisheries.

2 Wilderness

We are pleased that you are treating individual Wilderness Study Areas (WSA's) in detail in the Wilderness Supplement. Each area is described comprehensively, a positive feature, but there are some problems. First, the Park/Chapter nomination is confusing. Why not e sat of chapters like the EIS (Affected Environment, etc.) with WSA's as subheadings? Second, you present no justification in the Preferred Alternative for why you

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2 prefer wilderness or no wilderness for each WSA; we are left guessing your motives. Third, there is no integration between the Supplement and the main body of the RMP. Please include Wilderness as a category in Table 4 of the EIS and in a map of proposed wilderness/no wilderness designations. Finally, why are you considering in the RMP only those WSA's that were separately from the RMP? These are big areas - shouldn't their fate be considered in the

Proposed Plan

We are very disappointed in the Plan. Important data are not presented or are ignored with respect to grazing and mineral management. The two most important resource problems, overgrazing and impacts from mineral development, are ignored and no plan of action is presented to deal with them. Finally, the Plan continues to emphasize grazing, oil and gas, and hardrock minerals at the expense of other multiple uses such as recreation and wilderness, a violation of FLPMA.

Areas of Critical Environmental Concern

3 We favor designation of all of the Baggs Elk crucial winter range, the Gibbon's Beardtongue site, the Muddy Gap cushion plant community, White Pelican Island, and the raptor concentration areas as ACEC's. This is particularly important for White Pelican Island, since the white pelican is a candidate for threatened and endangered status. All areas should be off-limits to oil/gas leasing, hardrock mineral exploration, and off-road vehicle (ORV) use.

Fire Management

We are pleased to see a limited suppression policy proposed for 36% of the planning area. But in order to make it clear with the public, you need to justify it more fully, e.g., saves money, recognizes role of fire in natural ecosystems, etc.

Forest Management

4 The proposed Plan calls for a 40% increase in allowable harvest from 12.5 to 20.0 MMBF. We oppose this increase because "there have been no expressions of industry interest in increasing harvest levels" (Casper Star-Tribune, 06-17-87). We are particularly incensed at the use of "artificial" stagnant lodgepole pine stands without attempting any wood recovery. With the exception of precommercial thinning and salvage, no information is presented indicating how many acres and what timber volumes would be associated with different silvicultural treatments.

Lands Program

5 We understand the rationale for disposing of BLM holdings which are isolated and difficult to manage, although no avidance is provide to prove the "difficult to manage" assertion. However, we believe it is wrong to designate lands for disposal to permit "expansion and economic development" of local

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5 communities. These are public lands whose highest use is improving the national welfare.

Livestock Grazing Management

As indicated in the EIS and the Grazing Appendix, there are serious problems with the quality of range land in the planning area. 29.4% of the range is in fair condition and 6.1% in poor condition, while 61 grazing allotments (of 116 total) have a downward ecological trend (Table LVGM-AP-1). Average 5-year grazing use exceeds carrying capacity (current permitted use) on 15 allotments (Table LVGM-AP-1, The EIS (p. 4-5) indicates that 41% of the public land requires range rehabilitation because of inadequate plant production, undesirable species composition, downward range trends, poor animal distribution, and improper season of use. Competition between livestock and wildlife for food (or cover) on winter ranges is acknowledged. EIS, p. 139-210.

What is the Plan's proposal to resolve serious problems? Currently, 1.06 million acres or 66.6 million acres of public land in the planning area are in grazing allotments. This number will not change in the Plan. Grazing will increase 14%, from 181,464 to 206,940 AUM's, purportedly due to increased plant productivity. This is hard to believe, since only 29 allotments have upward trends in range condition, while 41 have downward trends and the rest are stable. Cattle will be excluded from a paltry 67 acres of riparian zone and 1,120 acres of crucial wildlife winter range.

Table LVGM-AP-4 shows that actions intended to improve range conditions are limited to rotational grazing systems on 5 allotments, later turnout dates on two allotments, 9.5 miles of fencing to protect riparian zones, and 27 reservoirs fenced off. A much greater commitment is made to actions to benefit cattle and sheep: 101 miles of new fences, 110 new reservoirs, 14 wells and springs, 8 miles of pipeline, 1,200 miles of snow fences, burning, disking, and seeding of 18,000 acres, and seeding (presumably to crested wheatgrass, an exotic species) of 11,520 acres.

The Plan should devote considerably more resources to restoring degraded rangelands. Protective actions must be undertaken, including reducing livestock numbers (drastically) and instituting non-continuous grazing systems on most allotments. Failure to undertake these actions will only make the rangeland restoration job more outrageous in the future.

Minerals Management

We had to deduce how much of the planning area would be open to oil/gas leasing, since that figure was nowhere stated. BLM has authority to issue leases on the 11.5 million acres of subsoil, plus 1 million acres of Forest Service land and 300,200 acres (15% of 8 million acres) of split-estate lands. Five million acres (45% of the available acres) are currently available and will be available for leasing under the proposed Plan (Table 2, p. 31). 81% of these lands are already leased.

Of a total of 122,720 acres of coal lands (among all items

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In Table 1, p. 4-511, 121,464 acres (92% + .1% open to leasing under the Plan, an increase of 30% over existing available acres. This increase is proposed even though, historically, coal mining has been economically feasible only in the planning area (Casper Star-Tribune, 5-6-79). All lands over which BLM has jurisdiction should be closed to all coal and geothermal leasing.

7 The environmental consequences of minerals management have not been explicitly addressed in the EIS. A brief reference is made to coal EIS's (p. 1184), but apparently there has been no environmental analysis carried out for oil and gas leasing. This is a serious oversight, because once leases have been issued, the BLM cannot prevent lease development. The EIS should summarize the environmental impacts of development historically found while leasing within the planning area and should predict the potential impacts of full field oil/gas development and mining of coal. The coal which will be made available for leasing. This information should be summarized in the Cumulative Impacts table.

We feel that lands should be opened to hardrock prospecting, coal mining, and oil/gas leasing only after thorough environmental analysis, including cumulative effects, has indicated which lands can be developed without major, irreversible resource damage.

8 Recreation Management

No provision is made to ensure that capacity for non-primitive and primitive recreation will be sufficient to meet demands. We recommend adoption of land classifications which will provide a range of recreational use, e.g., areas where motor vehicles are permitted only on existing roads and trails; areas where motor vehicles are restricted to roads; and areas where no motor vehicles (including snowmobiles) are allowed.

While the proposed policy of confining ORV's to existing roads and trails is laudable, it is considered and identified with current BLM resources. Off-road and off-trail ORV use is widespread and causes damage to soils, water, and vegetation, undermining, particularly with its soon to arrive ATV's and young drivers. Even if ORV's could be confined to existing roads, many trails are not maintained to sustain motorized use without grading. The EIS presents no information on how ORV damage is occurring, a serious deficiency. An extensive inventory of the planning area for ORV problems is needed. These areas should then be closed to ORV's and rehabilitation plans developed for each area.

9 Soils, Water, and Air Management

The EIS is in clear violation of Executive Order 11990 and the BLM regulations which implement that order. The regulations state that it is BLM policy to "protect riparian habitats, "preserve and enhance" these habitats, and carry out actions outside of these habitats if "environmentally acceptable" alternatives exist. All the Plan says is that it will "maintain riparian areas in good and excellent condition and improve areas that are being degraded" (Table 1, p. 62). This statement fails

9 fat short of the specificity required by the Executive Order. The EIS should contain a map showing riparian zones, a table listing areas where resource damage is occurring, and a plan for restoration of each area.

Wilderness

Roadless areas comprise only 2.9% (114,222 acres) of BLM holdings in the planning area, including Ferris Mountains and Adobe Town WSA's. Since this is such a small percent and also no wilderness currently exists in BLM land in Northeast Wyoming, we believe that all the WSA's should be recommended for wilderness designation. Wilderness status would not interfere with grazing or mineral development, but would have a positive effect on oil and gas production in Bennett Hills WSA, since military potential there is low (EIS, p. 73).

FLPMA and NEPA Violations

The proposed Plan intends to maintain minerals (oil/gas, coal, and hardrock) as the dominant use in the planning area, with grazing as the second most important use. This is a clear contravention of the multiple use mandate of FLPMA. Many consumptive uses such as wildlife, recreation, and wilderness given scant specific by this Plan, take a back seat to the past.

There is little variation among alternatives in terms of available acreages for many resource uses. For example, acres available for grazing vary less than 2% among alternatives and no alternative offers less than 145,000 AUM's. Table 1, p. 46). minerals, the lowest percentage of available acreage are: coal 94% of coal-bearing areas, oil/gas - 55% of all public lands, leasable minerals - 85% of all public lands. These figures indicate that the EIS violates NEPA, which requires Federal agencies to "rigorously explore and objectively evaluate all reasonable alternatives..." 40 CFR 1502.14. Furthermore, EIS's must provide "a clear basis for choice among options by the decisionmaker and the public" 40 CFR 1502.14.

As it stands now, with respect to grazing and minerals, the alternatives are not really alternatives at all. To meet the requirements of NEPA, alternatives which call for higher reductions in grazing and lands open to mineral exploration should be presented.

Thank you for your consideration of our comments.

Sincerely yours,

Jill Fraker
BLM Issues Chair

Responses to Letter 129

1. Thank you for the suggested revisions. We are always looking for ways to make our planning documents more understandable within the limits of our prescribed formats. We believe you will find this final document easier to follow. Your ideas will be considered in preparation of future planning documents. Also please see general response 2.

2. Please see general response 1. The land use planning for the area that includes the Adobe Town and Ferris Mountains WSAs was completed before work on this document began. The draft Adobe Town/Ferris Mountains wilderness EIS was initiated at that time. Then the decision was made that both the Divide and Medicine Bow resource areas (later combined into the Great Divide Resource Area) would be included in one RMP/EIS. The Adobe Town/Ferris Mountains wilderness EIS process was already proceeding on the previous schedule, so it was not combined with the Medicine Bow wilderness EIS. The final Adobe Town/Ferris Mountains wilderness EIS is now being prepared. That document will supplement the Medicine Bow/Divide (Great Divide) RMP/EIS.

3. The proposed plan in chapter 2 of this document contains a discussion of management direction and intent for all areas that were considered for ACEC designation. It also includes the rationales for selection of certain areas to be proposed for designation as ACECs.

4. Please see the response to comment 22 of letter 114.

The information in the newspaper report you mention was incorrect. As we said on page 109 of the draft RMP/EIS, our estimate of timber industry demand for sawtimber in the planning area is 30 to 40 MMBF per year. The acreages and timber volumes are site-specific information, because they can vary from locale to locale. How-

ever, assumptions are given for forestry activities on page 216 of the draft RMP/EIS. If these assumptions are applied to the preferred alternative, approximately 20 MMBF would be harvested over the next ten years. This would result in about 1,600 to 1,800 acres of clearcutting.

5. Section 203(a)(3) of FLPMA allows disposal of public land tracts "to serve important public objectives, including but not limited to expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including but not limited to recreation and scenic values, which would be served by maintaining such tract in Federal ownership." Also please see general response 9.

6. Please see general responses 4, 6, and 7.

7. Please see the response to comment 4 of letter 114.

8. Please see the response to comment 3 of letter 11.

9. A detailed inventory of riparian area condition and management needs will be a high priority workload involving considerable effort over the next five years. Also please see general response 7.

Response to Letter 150

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Also please see general response 1.

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John and Diana Ball
1137 Grant Street
Evanston, IL 60201

John Husband
EMP Team Leader
Bureau of Land Management
P.O. Box 670
Rawlins, WY 82301

September 18, 1987

Dear Mr. Husband:

1 We are writing to strongly urge you to recommend three wilderness study areas for protected wilderness: Encampment River Canyon, Prospect Mountain, and Bennett Mountains. All three areas are in Wyoming and worthy of wilderness status.

These are vivid, isolated areas of unsurpassed magnificence. All of them are home to many wild animals, including elk, deer, and bighorn sheep. We feel that it is vital to maintain them as isolated spaces of solitude and peace in our fast-changing, highly developed country.

We deeply oppose the BLM's bias toward oil and gas development in the Medicine Bow/Divide Resource Area. We are appalled by the BLM suggestion to open the entire 50 million acres in the area, with one single exception, to destruction and exploitation. Remember that your job is to best manage the land for all citizens and that, in this case as in so many others, the best management is to let it alone.

Sincerely,

Diana Ball

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[This handwritten letter has been typed verbatim to save space.]

Sept. 17, 1987
201 Fremont
Laramie, WY
82070

John Husband, Team Leader
Bureau of Land Management
Rawlins District
P.O. Box 670
Rawlins, Wyoming 82301

Dear Mr. Husband:

1 This letter constitutes our comments on the Draft Resource Management Plan and Environmental Impact Statement for the Medicine Bow and Divide Resource Areas. Please include this letter in the public record.

Of the four alternatives in the Plan/EIS, we strongly support alternative B and urge BLM to make it the preferred alternative. While alternative B is by no means perfect, it most closely follows what we believe to be the best management course for these BA's. The agency recommendation of alternative D is totally unacceptable to us. Alternative D unfairly places the benefits of management in the hands of a small group of individuals who have direct economic ties to the extractive activities that frequently take place on federal lands, i.e. timber harvest, mining and oil/gas leasing.

On the other hand, the benefits of management under alternative B would be spread out amongst the population within & without the management area. Increased opportunities for recreation, reduction of impacts on wildlife, and other benefits could be enjoyed by anyone who wishes to partake. One need just look at the hunter day estimates on pg. 120 (last paragraph) to see that there is some economic benefit that is also derived from favoring management efforts on wildlife (especially habitat protection) and recreation. Again we must state that we strongly support alternative B over alternative D. Rather than pick out specific problems we perceive in alternative D, we simply urge BLM to change its recommendation to alternative B. Our questions and concerns regarding specific aspects of alternative B are stated below.

A brief comment on the Wilderness Supplement and its recommendations is in order. We commend BLM on its positive recommendation for wilderness for the Prospect Mtn. WSA, and support the recommendation wholeheartedly. It makes perfect sense to add this small parcel of land to that already preserved as wilderness on the Forest Service land.

On the other hand, we do not understand and hence do not concur with BLM's no wilderness recommendation for the Encampment River WSA. There are no conflicts with extractive uses or others in this WSA except for grazing. We

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...understand the dilemma the agency faces concerning the Pinedale area Declaration (made by Leslie, but we inherit BLM with it) is a more suitable resolution to this problem. To not recommend the ACEC as wilderness for this reason is ludicrous. Surely an irrevocable violation (removing statistic) stemming today, as the same time, multiple designation as wilderness can be devised. We support a possible wilderness representation for the Sandstone River ACEC.

The Conclusion are the same regarding the Sandpit area. There are no significant resource conflicts in this area. In short, there appears to be no reason for the agency's non-wilderness recommendation. The ISA/WSA states that "only slight to no impact, short term and localized, exists, and no visible changes are proposed." In the same time, this area possesses outstanding naturalness, significant opportunity for solitude and primitive, unconfined recreation, and special ecological and visual resources. In other words, the Sandpit roadless area is a gem. The ACEC report in the wilderness supplement points out how outstanding this area is and leaves it unclear why a separate designation as the ACEC. We support the all-wilderness alternative and the alternate BLM to designate the Cascade ACEC as wilderness recommendation.

Our specific comments and questions concerning alternative B are as follows:

1. Why not make Cave Bluff an ACEC and close it to oil/gas/geothermal mineral development? Do we misunderstand the intent of ACEC designations? Pg 31.

2. If oil/gas/geo leases can be disallowed in Raptor Concentration Areas, we support it. Pg 32

3. Sand Hills ACEC - why not make it an ACEC under alt. B&D. Include the last sentence in Alt. C also. Pg 35

4. Lands Program - Access: Good language under alt. B. We support it. Pg 44.

5. Livestock Grazing Mgmt pg 77 - Range improvements. The number 1 area of improvements seem very bit. Is this necessary? Surely the agency does not pay for these improvements?

6. Minerals Mgmt. - Leasable Minerals, Coal - pg. 48
The objective is to expand the Indian Springs area. We do not support this expansion & do not think it belongs in this alternative.

7. Wildlife Habitat...Pg 69 - Raptor Concentration Areas - see #2 above.

A few more comments on the entire document and its approach/assumptions:

We do not believe that timber harvest should occur on any Federal land at a net loss (in dollars) to the BLM unless it is unquestionably required to meet wildlife or primitive, nonmotorized recreational needs.

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We strongly commend BLM for its new mgmt. approach and look forward to action in this front.

Soil, water, Air Mgmt Planning Criteria, pg 22, second column, second paragraph: We think that wildlife should be added to the most emphasis.

2 Vegetation Mgmt, Planning Criteria, pg 21, second column, fourth paragraph "Wildlife planning should...limitations on furnaces and overpasses." This sentence shows strongly bias against recreation, does it not? If this statement applies to recreation, why not apply it to all development, i.e. OHVs, res. subdivisions, etc....Either delete it from the document or apply it to all new resource activities.

We find it inconceivable that the +150% can be increased as much as it was in the forested areas and we question the validity of the calculation.

We appreciate the effort BLM put into this Plan/EIS and hope that the agency carefully considers our comments.

Sincerely,

/s/ Jeff A. Fassler
/s/ David E. Carnes

Responses to Letter 151

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments.

2. The statement about limitations that you quoted applies to all other BLM programs as well as to recreation. We are constrained by funding and workforce realities in all of our actions. The statement should not be interpreted as a bias against recreation, but as a statement of realistic limitations.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Fish and Wildlife Enhancement
Wyoming State Office
2120 Capitol Avenue, Room 2110
Cheyenne, Wyoming 82001

September 17, 1987

FWE-61411
ARTEST/MEDMPEI

Memorandum

To: John Husband, Team Leader, BLM, Rawlins, WY

From: Acting State Supervisor, USFWS, Cheyenne, WY (FWE-61411)

Subject: Review of Medicine Bow-Divide Resource Management Plan Draft Environmental Impact Statement (DEIS) and Wilderness Supplement

We have reviewed the subject statement, and the following constitutes the comments of the U.S. Fish and Wildlife Service (FWS).

We found that the DEIS identified most issues and offered management options under at least one of the proposed alternatives that would benefit fish and wildlife resources. We agree with this - in fact, we do not have a unanimous preference for any one of the alternatives as presented in the DEIS. We suggest that the best option would be to develop the better management features into a preferred alternative, rather than limit the choice to the four alternatives included in the DEIS. Therefore, we recommend that the Final EIS "preferred alternative" be a synthesis of the best resource management features found in each of the different alternatives.

Grazing has a substantial impact upon fish and wildlife resources in the Resource Area. Direct competition by livestock with wildlife on riparian, winter/crucial winter, and parturition areas can have significant effects on these important habitats and the wildlife dependent upon them. Therefore, we recommend that the maximum forage 1 utilization on winter and crucial winter big game ranges not exceed 20 percent on good ranges, with 30 percent going to fair and no more than 40 percent going to livestock. On overgrazed, trend-down ranges, we recommend that forage be allocated 50:50 to wildlife until the range recovers. We also recommend that prairie dog towns be limited to a 40 percent utilization level on riparian areas. Generally, livestock access to riparian or streamside zone in a fair-to-poor condition may still have to be restricted further to allow for vegetative regrowth, recovery and maintenance. We concur with the elimination of grazing on the Seedskee Ridge area, but also recommend that other valuable wildlife habitat be protected from brain's (e.g., escapement from Prior Canyon, Sawmill Pass, Prospect Mountain, and Miracle Mile).

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J. Hussend/BLM-Rawlins, WY - 2 - 9/18/87

2 The DEIS indicates that monitoring is needed before any additional grazing allotment adjustments can be made; however, no indication is given as to when initiation of this important management program will commence. We recommend that monitoring of all allotments be completed in two years and an allotment management plan initiated immediately thereafter. The monitoring plan should include a program to evaluate compliance and measure progress towards resolution of resource conflicts. The range monitoring, recovery evaluation, and decision should be coordinated closely with the Wyoming Game and Fish Department (WGFD).

In our opinion, the Resource Area does not have the timber base to support the 200 percent increase in annual timber harvest. Over current levels, during the next 5 years, would significantly impact other important resources. The timber is ability to provide elk with thermal and hiding cover, winter range, and detrimental effects as well as its soil-binding and water-quality functions, for instance, in many areas, the commercial forests overlap. Therefore, we strongly recommend that the highest and best use of many of these small, forest holdings is to provide habitat for wildlife and maintain watershed values in the drainage. We also recommend that the timber harvest not be increased over present levels.

3 As with timber, mineral developments must be weighed against the other resource values. The most important method for mitigating the impacts of oil and gas development is good reclamation practices and the avoidance of sensitive areas. Generally, on slopes of less than 15 percent gradient, successful reclamation can be expected, with success rates dropping dramatically on steeper slopes. With these points in mind, we strongly recommend leasing subject to NSO on slopes with more than 15 percent gradient and timely reclamation of disturbed areas. We also recommend that seismic operations be restricted to when the soil is dry or frozen, in order to minimize vegetative cover loss and soil compaction. Drilling activities should avoid crucial winter ranges, especially in the Soggs Rare units, needs to be closely coordinated with the Wyoming Game and Fish Department to protect these important wildlife areas. The mineral protection requirements proposed in Alternative B are preferred.

4 We have concerns regarding the removal of many existing mineral withdrawals (61,493 acres) as proposed in the "preferred alternative." We recommend that any elimination of existing withdrawals be closely coordinated with the general public. Areas previously withdrawn which contain aquatic riparian areas, crucial winter ranges, state and federal wildlife management areas, and important recreation areas should be maintained as withdrawals. We support your agency's recommendation to maintain agricultural withdrawal for FWS National Wildlife Refuges and Bureau of Reclamation lands around Seminoe, Kortes, and Pathfinder Reservoirs, Miracle Mile and Morgan Creek, and to maintain mineral withdrawals for Teton Reservoir, Dubois and Nine Mile sites. We recommend that mineral withdrawals not be eliminated for Miller Hill Lake, Antelope Reservoir, and Flowing Well Lucan Road.

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J. Hussend/BLM-Rawlins, WY - 3 - 9/18/87

5 Pertaining to raptor protection, we recommend that the nests of the listed nonendangered raptor species receive the following seasonal nesting protection.

Golden Eagle	February 15 - July 15
Osprey	March 15 - August 15
Prairie Falcon	March 15 - August 1
Merlin	March 15 - August 1
Ferruginous Hawk	March 15 - July 15
Cooper's Hawk	April 1 - August 15
Burrowing Owl	April 15 - July 15
Swainson's Hawk	May 1 - July 15
Goshawk	March 1 - July 31
Peregrine Falcon	April 1 - July 15

Application of raptor-nest protective measures is dependent upon adequate inventories to identify potential conflicts before surface-disturbing activities are permitted. If adequate inventories are not available, as is the case in some portions of the Resource Area, we recommend that your agency staff conduct an on-site inspection of the project to ensure raptor nest protection. As a general guideline, we recommend that a one-quarter-mile radius buffer zone be maintained around each raptor nest. Smaller buffer zones could be designated on a site-by-site basis after consultation among BLM, state, and FWS biologists. Topographic relief, vegetative density, or other circumstances may allow reduction of buffer zones in some situations.

We have concerns about your agency's plan to possibly dispose of 10,000 acres of public lands within the Resource Area. Scattered parcels of public land can provide substantial wildlife values in areas where the habitat values of private lands have been altered or severely impacted. Disposal of public land may severely impair the opportunity for outdoor recreation, such as hunting and fishing. Scattered land parcels may seem difficult to manage; however, a policy of leasing many of these parcels remain natural or revert to natural conditions requires minimal BLM management. In some years it is truly in the best interest of the public and resources associated with the land to dispose to a tract, we recommend an equitable land exchange rather than outright land sales. Land sales and exchanges could also influence FWS programs. Currently, land exchanges are one of the best methods for FWS to acquire wetland lands. We remain partially interested in riparian and wetland areas which you suggest could be exchanged to support waterfowl and migratory birds. In cases where the property does not fit our program needs, BLM has the responsibility to protect protection of wetlands and riparian areas even when are transferred to the private sector, as required by Section 203 of FLPMA, Executive Order 11,990 and Wyoming policies. Please keep into office interest of plans to dispose of or exchange any of the lands in question.

153D

J. Hussend/BLM-Rawlins, WY - 4 - 9/18/87

We support the proposed designation of Area of Critical Environmental Concern (ACEC) for Seminoe Hills and Seminoe raptor concentration areas. We also support ACEC designation of the other seven identified raptor concentration areas. The advantage of this designation is that it provides protection to raptor nesting areas than relying solely upon leasehold stipulations. The white Mountain resting island in Pathfinder Reservoir should be designated ACEC. This island supports one of the largest pelican nesting sites in Wyoming. Due to existing and proposed development activities in the Sand Dune Hills unit, we recommend that portions of this area unit also be given ACEC designation. This designation was one of the mitigation measures we thought was agreed upon during our in operations with your agency, Wyoming Game and Fish Department, and the National Wildlife Federation concerning the Atlantic Rim coal tracts.

The preferred alternative proposes to maintain existing habitat management plans and continue the development of habitat plans and cooperative management agreements for the Sand Hills. We support these plans and believe that adequate funding is provided for the implementation of these plans concurrently with other resource improvements.

8 Coordination under provisions of Section 7 has not been completed between Fish and Wildlife Service and the Bureau of Land Management. Specific endangered species concerns or issues will be addressed by the Service at a later date through the consultation process. The Section 7, Endangered Species Act consultation should be included in the final EIS. In addition, we are coordinating revisions to the coal unsuitability application with BLM District personnel. These revisions should be included in the final EIS coal appendix.

9 We have reviewed Wyoming Game and Fish Department's August 17, 1987, specific comments pertaining to the Subject DEIS and find them to adequately represent our agency's concerns. Therefore, we recommend that your agency give serious attention to correcting or resolving issues that WGFD has presented.

We appreciate the opportunity to comment on the DEIS. If you have any questions, we can be contacted ex. 2371, 772-2374.

/s/ Tim Thomas

cc:
Assistant Regional Director, USFWS, Denver, CO (ref:60120)
Field Supervisor, USFWS, Helena, MT (ref:61320)
Director, WGFD, Cheyenne, WY
Director, BLM State Office, Cheyenne, WY

Responses to Letter 153

1. Thank you for your recommendations for allowable utilization percentages within crucial winter range. As we discussed in the Livestock Grazing appendix to the draft RMP/EIS, grazing treatments included in livestock grazing AMPs will be designed to provide forage for consumptive use while proper and judicious use levels for key forage species are maintained. The level for this normally is 50% of the current year's growth for grasses. The needs of big game will be considered.

2. We agree that reclamation usually is more successful on gentle slopes than on steep slopes. We require that drilling operations be located or relocated in areas where surface disturbance can be minimized and rehabilitation can be facilitated as much as possible. Ground conditions are considered when seismic operations are authorized.

   Drilling and other disturbance in crucial winter ranges will be coordinated with the WGFD. In the proposed plan, the needs of big game are covered by application of the Wyoming BLM standard mitigation guidelines, with additional spatial and temporal limitations in specific areas. Also please see general response 5.

4. Please see general response 10.

5. Under the Wyoming BLM standard mitigation guidelines, activities or surface use would not be allowed between February 1 and July 31. These dates provide protection for raptors. The dates could be modified during site-specific analysis of proposed activities to accommodate the needs of individual species.

6. Please see general response 9.

7. Please see the response to comment 1 of letter 25.

8. This consultation process has now been completed. The result was a finding of no effect. Letter 173 is a memorandum from the USFWS giving that agency's biological opinion.

9. The revisions you mention are included in the revised Coal appendix that is included in this document.

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Mr. John Husband -2- September 18, 1987

multiple use, mandate was driving the decision-making process. In addition, these areas can be adequately protected without having to resort to a VNL designation.

5 Fifth, we are confused about the language following the No Surface Occupancy Stipulation on page 472. Part of the first paragraph of this stipulation's guidance section states "There will be no exceptions to this stipulation granted without amendment of the appropriate land use plan." And yet, the beginning of the third paragraph under this same section states "Exceptions may be granted by the District Manager to the NSO stipulation will be subject to the same test used to initially justify the imposition of this stipulation." These statements seem to contradict each other. Please explain.

Furthermore, we are concerned about the above-quoted statement that exceptions to the NSO stipulation would require a land use plan amendment. Chevron believes an NSO stipulation would require a land use plan amendment, but making a stipulation would amendment of the plan is unnecessary for purposes of making a stipulation. The formal amendment process for necessary delay and constrain the application and modification of the public will this stipulation waiver purpose would be duplicative and ineffective since the public will have already been given the opportunity to comment on the surface mitigation measures when the plan was being developed. This type of waiver process should be made use on a case-by-case basis as to whether a NSO restriction is necessary, and if appropriate, a waiver of the stipulation should be granted without complicated amendment procedures. It is the BLM's responsibility as land managers to make stipulation waiver decisions using waiver decisions using the guidelines and qualified personnel. We strongly urge that this NSO waiver the Bureau's expertise and qualified personnel. We strongly urge that this NSO waiver procedure be clarified so that the authorized local officer is empowered to grant reasonable and appropriate waivers of NSO stipulations.

6 Sixth, in your discussion of groundwater on page 132, we are concerned that the statements regarding potential causes of groundwater pollution are so general that they could unnecessarily alarm the public. For example, it is stated "The energy industry is creating potential sources of aquifer contamination at a very rapid pace." What is meant by "a very rapid pace"? It would also be appropriate to discuss the likelihood of pollution associated with the creation of these sources, as well as the past record of whether and to what extent the petroleum industry was the cause of any aquifer pollution. Another example of this same type of general statement on that page is "Improper well completion practices is a common cause of drawing water aquifer contamination and injection operations." What is meant by "a common cause"? This statement makes it sound as though injection wells oftentimes cause water contamination. We were shocked to read this, and would like for you to justify these statements.

7 Seventh, under Alternatives A, B and D (at pages 232, 232 and 238, respectively), it is stated that there would be a 1/4 mile wide corridor on either side of the North Platte River, amounting to no surface occupancy on 1,250 acres. The BLM's justification for the use of the NSO limitation, as stated on page 39, is "to maintain the quality of the visual resources." However, this severe restriction on oil and gas activity does not seem justified when only 13 miles (page 128) of the 80 miles (according to the Land Status map) of the North Platte River 1/4 MA border BLM public lands. The BLM's control over the visual resources would be severely limited and frustrated in this situation, protecting the visual resources would be severely limited and frustrated in this situations, especially since most of these 13 miles are in the "checkerboard" position. It seems as though the application of the NSO stipulation along the North Platte River would not serve its purpose and would only encourage oil and gas operations on the private part of the checkerboard lands along the river. For these reasons, we request that this proposed protective corridor be deleted from the draft plan.

154A

Chevron

Chevron U.S.A. Inc
6400 South Fiddlers Green Circle Englewood, CO 80111 P.O. Box 599 Denver CO 80201

Lisa Pascha Mercier
Staff Analyst
Legislative and Regulatory Affairs

September 18, 1987

Medicine Bow-Divide Resource Area
Draft RMP/EIS

Mr. John Husband, Team Leader
Bureau of Land Management, Rawlins Dist.
P.O. Box 670
Rawlins, WY 82301

Dear Mr. Husband:

Chevron U.S.A. Inc. commends you and your EIS team for preparing a well-written, concise, informative draft RMP/EIS document for the Medicine Bow-Divide Resource Area. The fact that your area is such a significant and established oil and gas producing region is reflected by the manner in which your group, for the most part, professionally and realistically discussed oil and gas issues. Chevron currently holds oil and gas leases on 26,833 acres in your resource area, including 3,650 producing acres. Therefore, there are several points of concern that we would like to bring to your attention.

1 First, we request that you include a map that shows which types and where the various seasonal wildlife, no surface occupancy or special resource protection stipulations are applicable. We appreciate your inclusion of the amount of total acreage subject to these stipulations, but as a practical matter, these figures do not mean much unless we can determine exactly where you are talking about.

2 Second, on page 32 it is stated how many acres would be subject to reasonable restrictions under each alternative, yet it is not clear whether you are applying these seasonal restrictions to wildlife-state lands as well as public lands. We do not believe the BLM has the authority to apply seasonal restrictions to private surface acreage even if the minerals are federally owned unless those restrictions are related to threatened or endangered species. Please clarify.

3 Third, on page 31 it is stated that five million acres would be open to leasing subject to standard stipulations under Alternatives A, B and D. However, on page 11 it is stated that there are only four million acres of BLM-administered surface over federal minerals. How do you account for this discrepancy?

4 Fourth, Chevron is concerned about the potential designation of the four proposed national natural landmarks, especially the Washake Basin because it overlies the Washake Basin Field NGS. Our concern is based on the fact the VNL's are administered by the National Park Service. While the BLM is directed to manage for multiple uses, the National Park Service is directed to manage for the preservation of resources. We are concerned that if these areas, especially the Washake Basin, are designated, the tradeoffs between oil and gas development and surface protection would not favor oil and gas development. Therefore, we request that these areas be dropped from consideration as VNL's due to the potential future conflicts that could arise if a preservation, instead of a

Northern Region - Exploration, Land and Production

154C

Mr. John Husband -3- September 18, 1987

8 Chevron's eighth concern pertains to the misleading discussion of oil and gas in the wildlife appendix, particularly the last seven pages (beginning on page 477). We believe that these paragraphs contain some serious errors and omissions in the discussion regarding the impacts of oil and gas operations. For example, it is stated that 279,200 acres of wildlife habitat have been "lost" over the past 72 years. The misleading part of this statement is that it does not take into account whether that oil and gas activity occurred for one hour, one month, or one year. In addition, it is misleading to say that habitat is "lost." It would be more accurate and realistic to state the size of the surface acreage and avoidance zone that was created for each of several lengths of time, such as one day, one month, one year, five years, ten years, etc. Or, the length of time that the habitat has been occupied for each activity could be computed so that you would have figures that represent "acres of oil and gas activity impact" for a given period. The computer could add up how many acres of land were used for each oil and gas activity, and how many days each of these activities took. There are several other ways that this statement could be reworked to portray a more accurate picture.

9 Another inaccuracy is in the next to last paragraph on page 477, in which it is stated that using the assumption that as much as one-third of the lost habitat has been restored, approximately 186,000 acres no longer provide habitat capable of supporting fish and wildlife populations at preconvelopment levels." The assumption that this assumption was used, because on page 220 it is stated that 71,126 of the 93,039 surface acres disturbed by oil activities, which amounts to 76.5%, have been reclaimed. Using this 76.5% figure, it appears that it would be more accurate to say that 213,413 acres have been restored and 43,263 acres of habitat are currently being used for oil and gas activities.

We also wonder how you determined what the "predevelopment levels" of wildlife were. Drilling started in the area in 1911 -- was this statement based on wildlife studies conducted before this date?

10 In addition, we do not know how you calculated the 109,146 acre figure in the last paragraph on page 477. Please explain.

11 Ninth, on page 220 it is projected that approximately 1,440 new wells will be drilled in the planning area over the next 15 years, based on a projected growth rate of 0.723% per year. It is also stated that 3,671 wells were drilled from 1911 to 1985. Based on this information, our computations show that a 0.723% increase (starting with 3,671 wells) each year from 1983 until 2003 would result in 393 new wells, not 1,440. How did you arrive at 1,440 wells?

Thank you for the consideration of our comments.

Sincerely yours,

Lisa P. Mercier

LPM:lja

Responses to Letter 154

1. Please see the response to comment 2 of letter 93.
2. Please see general response 8.
3. Please see general response 8.
4. Please see the response to comment 3 of letter 112.
5. Please see the response to comment 3 of letter 93.
6. Please see the responses to comments 6 and 7 of letter 112.
7. It was not our intention to indicate that NSO would be a requirement. In chapter 4 of this document, under "Effects on Recreation," the wording on the section about oil and gas actions says that the Wyoming BLM standard mitigation guidelines would protect recreation values in the North Platte River SRMA (¼ miles on either side of the river). The paragraph goes on to say that this would prevent conflicts between recreationists and oil and gas development activity in these areas. The restriction would allow the BLM to maintain the quality of recreation along the North Platte River that now exists, yet it would allow the placement of oil and gas facilities within the 1/4-mile corridor if it could be demonstrated that such development would not have adverse effects on recreation resources along the river.
8. Thank you for reminding us that the length of time that an area is avoided by big game can vary. It might have been better to say that the habitat has been lost or made less desirable because of past disturbance.
9. The apparent discrepancy arises because many of the areas have been reclaimed with the use of plant species that provide soil stabilization but are of little value as forage for big game. In addition, much of the acreage that has been reclaimed is in field areas where other wells are still producing, so activity in the field continues to make habitat less desirable than undisturbed areas. Please keep in mind that this is an estimate made with the use of the assumptions on page 477 of the draft RMP/EIS.
10. We arrived at the figure you question by dividing the estimated acreage disturbed in the planning area over 20 years by 20 to determine the average amount disturbed per year. (The 20-year disturbance figure is shown near the bottom of column 1 on page 220 of the draft RMP/EIS.) Using the assumption that twice as much habitat is lost or made less desirable as is physically disturbed, we determined the average annual amount of physical habitat loss and the amount of avoidance zone created. Multiplying this by the amount of disturbance projected for the future yielded the acreage estimate you mentioned. Please keep in mind that this is an estimate.
11. We used the following procedure to arrive at an estimate of 1,440 new wells over the next 20 years: (a) multiply the current number of new wells drilled (based on the projected line on table O&G-AP-1—about 66 for 1986) by 1.00725 to get the projected number for 1987; (b) multiply the projected number for 1987 by 1.00725 to get the projected number for 1988; (c) multiply the projected number for 1988 by 1.00725 to get the projected number for 1989; (d) repeat this process until you get to a projected number for 2005; and (e) add the results of all of the steps, starting with 1986.

155A

(307) 332-7031

WYOMING OUTDOOR COUNCIL
P.O. Box 1449 — 201 Main — Lander, WY 82520

September 17, 1987

Mr. John Husband, Team Leader
Bureau of Land Management
Rawlins District
P. O. Box 670
Rawlins, Wyoming 82301

Subject: Draft Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas

Dear John:

Thank you for the opportunity to review and comment on the Draft Resource Management Plan and Environmental Impact Statement for the Medicine Bow and Divide Resource Areas. These are important planning documents, and I welcome the chance to respond to them, on behalf of the Wyoming Outdoor Council.

The overall impression one obtains from an examination of the Draft Plan is that it signals a major shift toward commodity production, and away from recreational use and habitat improvement for the enhancement of wildlife diversity and numbers. We are genuinely alarmed by the radical changes in emphasis which are being projected.

I should like to organize our comments under topical headings, as follows:

LIVESTOCK GRAZING

We note the expectation that authorized livestock grazing use under preferred Alternative D would increase from 161,464 AUMs in the long term to 186,940 AUMs, a figure which is 18% above the current active preference level and 27% above the five-year average licensed use level. This significant increase is projected at a time when that portion of the area under consideration lying south of I-80 has just experienced a drought of once-in-a-lifetime

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severity. Moreover, your appraisal of the current ecological condition of rangeland in the Medicine Bow livestock grazing AIS area places 32% of all the classified acreage in the "fair" or "poor" categories.

1 Since you also project a shrinkage of 7,579 acres of rangeland in the classified acreage total within the Medicine Bow grazing area, we are only slightly reassured by the assertion that "no adjustments (in authorized AUMs) would be made until adequate data are obtained through monitoring." It would appear that Alternative D (anticipating a reduction in authorized livestock use to 161,108 AUMs) would be the more prudent management plan.

MINERAL RESOURCES

2 Regarding the withdrawal of land from mineral exploration and development, The Classification and Multiple Use Act of 1964 required the Bureau of Land Management to consider classifying lands for disposal and multiple use management. Under this law, 3,651,000 acres were designated in 1987 for retention and multiple use management. Now, preferred Alternative C would revoke this withdrawal for 3,644,000 acres, that is, for 99.8% of the original withdrawal. This is effect almost not at all by the proposal of installing 6,480 acres. This drastic change in land management policy would seem to foreshadow a shift away from multiple use and toward mineral exploration and other types of land development. For practical purposes, the entire area would now be open to mineral entry.

3 The fact that all areas with coal development potential would now be available for leasing is a cause for great concern to the Wyoming Outdoor Council. We recommend adoption of principles along the following lines, in planning guidelines:

(a) At the present time, market conditions do not justify the creation of new surface mining operations for coal. Before further development is permitted, a strong case should be made for its need.

(b) In order to make possible a balanced use of the natural resources within these areas, whatever development of coal deposits occurs should be carefully limited, both as to quantity and area.

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3 (g) In order to avoid water pollution, min'g activities should not be located close to rivers and to dams.

(h) Where permitted, coal development should "not only in reclamable areas. Since reclamation is rarely not possible on such sites as the Red Rim, it should be permitted in irreplaceable locations like these.

4 Furthermore, the Draft Plan emphasizes the opening of areas of national environmental concern, such as to oil and gas leasing. Rather than relying upon mitigation procedures, the Outdoor Council would urge adoption of Alternative B, under which the ACECs would be closed to oil and gas leasing. Most especially, this prohibition should apply to the Sand Hills area, which is in no sense reclaimable.

FOREST MANAGEMENT

We also note that the allowable harvest level for timber would be increased under the preferred alternative 20 MMBF from its present level of 12.5 MMBF per decade to 17 MMBF. Furthermore, timber would be harvested at an accelerated level -- approximately 16.5 MMBF in the first five years of the first decade. . . .

Believing as we do that Wyoming's climate and soils are not well-suited to silviculture, we have little confidence in the Plan's assertion that "productivity would increase with time because of few harvesting restrictions." Rather, we recommend reconsideration of Alternative B, with its reduction of the harvest level to 6MMBF per decade.

WILDLIFE/HABITAT

Alternative D asserts that "... intensive forest management ... -- which we understand to mean a 40% increase in cutting activity; opening up the entire area to mineral leasing; a 15% increase in pressure from grazing; and a continued shift toward cattle and away from sheep, with attendant implications for accelerated degradation of riparian habitat -- I am TTA of the commercial forestland would adversely affect big game in the short term through habitat disturbance and displacement. In the long term, habitat would be improved through increased age class and habitat

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diversity. The habitat value of the remainder of the forest would decline in the long term."

We believe that this approach to forest management is fundamentally in error, and will result in permanent debilitation of both habitat and wildlife. Hence, we strongly oppose it.

The Wyoming Outdoor Council hopes very much that you will re-consider the directions in which you are proposing to move. Should you decide to do so, we should be glad to assist in whatever ways are possible.

Sincerely,

L. John Kendrick
Executive Director

Responses to Letter 155

1. Please see the response to comment 152 of letter 103.

2. Please see general response 10.

3. The coal planning process is described in 43 CFR 3420.1-4 and in the Coal appendix to this document. This process involves four major steps to be used in identifying federal coal areas that are acceptable for further consideration for leasing: (1) identification of areas with development potential for coal, (2) application of the coal unsuitability criteria, (3) multiple-use conflict evaluation, and (4) surface owner consultation. These steps have been carried out in sequence for the review area, and the results are presented in the Coal appendix.

4. Areas are closed to oil and gas leasing only when they contain important values that cannot be adequately protected by other means, just as areas are not withdrawn from locatable minerals activities unless important values are present that cannot be protected in other ways. Our authority to manage surface disturbance associated with oil and gas exploration and development is sufficient to maintain the values that warranted recommendation of ACEC designation.

   Our experience with oil and gas wells in the Sand Hills area and other areas with similar soils indicates that they can be successfully reclaimed.

156

Louisiana-Pacific Corporation

PO Box 459
Seminole Mounting 82520
307 734-7491

Bureau of Land Management
Attn: John Husband, Team Leader
Box 670
Rawlins, WY 82301

September 17, 1987

Dear John Husband:

This letter is a response to the Bureau of Land Management: Resource Management Plan for the Medicine Bow-Divide Areas.

1 As your staff has noted in the Forestry Appendix, there is a greater demand for timber resources in the Saratoga Valley than is being supplied in the U.S. Forest Service and other private sources. It is in favor of the maximum harvest of timber that is available on your management area's sustainable yield.

According to Map #20 in the Draft Environmental Impact Statement, there is a large area of commercial forest land near the Platte Mountains. Louisiana Pacific Corp. (formerly Edward Hines Lumber at the date of purchase) has harvested timber in that area before. However due to long transportation distances one sees in the area has been harvested by our company. If an easement could be obtained to haul logs off the south side of this area, the potential for this company to cut timber there would be much better.

In contrast to the Shirley Mountain area (also difficult to reach) is the Prospect Mountain Area. According to your inventory data this area is a high fire caused mortality situation. The overall health of the forest could be improved and the local economy's would benefit by timber harvesting on Prospect Mountain.

Many anti-progress special interest groups that are against timber harvesting would lead people to believe that an area is reclaimed useless after a timber sale has been initiated on a part of the forest. Louisiana Pacific Corp. believes in keeping the forest working for all people, not just a few. Timber sales do not exclude other forest related activities, that make the forest a healthier atmosphere to enjoy.

Thank you for the opportunity to comment.

Sincerely,

David L. Slater

David L. Slater
Resource Manager, Louisiana Pacific Corp.

Response to Letter 156

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Since Prospect Mountain is a WSA, please see general response 1.

159A

AMOCO

Amoco Production Company

[illegible]
[illegible]
[illegible]
[illegible]

Tom W. Allen
Regional Environmental
Issues and Program Manager

September 17, 1987

Mr. Richard Bastin, District Manager
Bureau of Land Management
1300 3rd Street
P. O. Box 670
Rawlins, WY 82301

File: WWA-543-031

Dear Mr. Bastin:

Medicine Bow/Divide Resource Management Plan

Amoco Production Company, a wholly owned subsidiary of Amoco Corporation, is incorporated for the purpose of exploring for and developing oil and gas resources. We have both operations and leasehold within the boundaries of the Medicine Bow/Divide Resource area, and as a result, have great interest in the subject draft management plan RMP/EIS. Amoco appreciates the opportunity to comment on the document.

In general terms we believe the plan does adequately provide the public with information pertinent on how the BLM will manage the resource area. However, there are several items which both require comments from Amoco or clarification from the BLM. One of these concerns deals with the information where lands are subject to seasonal restrictions and surface disturbance restrictions. It would be very helpful if a map could be developed that would indicate these areas. By providing the maps, operators/lessees would be in a better position to assess how their individual proposals would be affected by the restrictions. In this way, operators/lessees could work more effectively with the BLM in planning proposed operations.

1

Another primary concern is the management proposal that 1.4 million acres or 28 percent of the federal mineral estate be subject to seasonal stipulations. It is difficult to determine in reading the plan whether or not these special stipulations will apply only to public lands or

2

159B

Mr. Richard Bastin, District Manager
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Page 2

whether split estate lands will be included. We ask that clarification be given concerning this particular situation. We ask that BLM be aware of the potential complications in attempting to attach special stipulations to privately owned surface lands. While this situation represents a complex surface ownership issue, it appears that legal precedents and current regulations recognize the rights of private landowners to exercise control over their surface. We recommend this perspective be emphasized in the plan relative to split estate lands.

2

Another concern relates to the proposed Washakie Basin National Natural Landmark. The DEIS stated that the area would be enhanced by designating it a National Landmark, thus ensuring that natural history values would be considered during the review of any proposed surface disturbing activities. We do not feel this policy is warranted, especially considering the fact that oil and gas operations can coexist with areas possessing sensitive values. This is accomplished by a thorough environmental analysis by BLM resource specialists once an applicant files a permit request. By using this procedure to analyze impacts and determine mitigating measures, resource values of areas such as those found in the Washakie Basin can be protected while still allowing multiple use. Since a portion of the area that would be designated a National Landmark contains known potential for oil and gas, we request the area not be designated a National Landmark and remain open to multiple use managed by the BLM.

3

The DEIS also includes areas that are under consideration as areas of critical environmental concern (ACEC). The DEIS indicates that the proposed ACEC's will be managed in accordance with surface protection requirements. However, we are concerned that these particular requirements could include all possible stipulations. If strictly applied, these stipulations could preclude all oil and gas activities. It is difficult to determine under what constraints oil and gas will be allowed in these areas based on information included in the DEIS. It is recommended that BLM provide much more specific information as to how these areas will be managed relative to oil and gas activities.

4

Another area that appears to be extremely problematic in implementation of this plan is the provision that all exceptions to no surface occupancy stipulations can only be made through a land use plan amendment. The language

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Mr. Richard Bastin, District Manager
September 17, 1987
Page 3

of this proposal differs from the optional guidelines issued by the Wyoming State BLM office. According to state office guidelines, a NSO stipulation may be waived either by the State Director or through a land use plan amendment. If the option to implement a land use plan amendment is used, it could delay and unnecessarily constrain the BLM decision making process. We believe the local BLM district level managers have the necessary expertise to recommend waivers to the State Director. This would allow flexibility in decision making and not constrain proposals by operators. It is our recommendation, therefore, that the plan include BLM's intention to recommend no surface occupancy waivers to the State Director based upon a review by Resource Area or District level management.

5

Amoco endorses adoption of alternative C as the preferred alternative with some modifications. We believe that if BLM modified this alternative by proposing no plans reasonable, seasonal constraints on the 1.5 million acres of FOS lands not constrained for specific purposes, this alternative would provide more adequate land management direction and mitigation measures for certain resources within the planning area. As stated in the DEIS, this resource area contains millions of acres of highly valuable and perspective oil and gas acreage. It is important that this potential receive a high priority during the formulation of land management planning decisions. It is important that management philosophy within the Resource Area reflect the importance that oil and gas resource development has played in this portion of Wyoming. It is our belief that BLM can implement an effective management policy that reflects safeguarding various resource values while, at the same time, promoting oil and gas activities.

6

Thank you for considering our comments to this plan.

Very truly yours,

[signature]

JRB/lmm

LTR786

Responses to Letter 159

1. Please see the response to comment 2 of letter 93.
2. Please see general response 8.
3. Please see the response to comment 3 of letter 112.
4. Please see the responses to comments 2 and 3 of letter 93 and the response to comment 4 of letter 112.
5. Please see the response to comment 3 of letter 93.
6. Please see the response to comment 1 of letter 93.

161B

1 has a bias toward oil and gas development, to the detriment of wilderness and primitive recreation values. Please reconsider here as well.

Thank you.

Joe and Mary Parks

161A

Sept. 15, 1987

Joe and Mary Parkin
P.O. Box 126
East x, Wyoming 8433x

John Husband, RMP Team Leader
Bureau of Land Management
P.O. Box 670
Rawlins, WY 82301

Sir:

1 We hope we are not too late to have our opinion count on the Bureau of Land Management's proposals for wilderness in southeastern Wyoming. An area we are intimately acquainted with, having hiking the Snowy Range of the Medicine Bow and fished the Platte, among other things. We understand that the BLM has proposed a paltry 1,148 acres of wilderness in the Prospect Mountain area out of all the areas in the region deemed suitable for wilderness designation.

This is typical of the BLM, which is glued almost inextricably with the grazing, timbering, drilling lobbies and has such a myopic, tunnel vision fuse and route it at all costs* philosophy.

As forward thinking Americans and frequent visitors to Wyoming and the wildernesses of the Rockies we support wilderness designation for all three BLM wilderness study areas - Encampment River Canyon, Prospect Mountain, and Bennett Mountains. In its own studies the BLM admits that Encampment Canyon has outstanding opportunities for primitive and uncontined recreation and that Bennett Mountains "conveys a feeling of undisturbed open space, isolation, and peacefulness." We might note that over 99 percent of BLM lands in the area are already roaded to death and the importance of the few roadless areas left is thus increased immeasurably.

Having hiked, backpacked, and fished over quite a bit of the Rockies and the West, we know how important unspoiled wilderness is for people trying to escape the concrete jungle and the clutter of their minds. We must preserve what little is left at all costs. It would be more than a shame, it would be a crime, if the BLM failed to reconsider and recommend all three of these beautiful areas for wilderness designation.

We also oppose BLM plans to open the entire Medicine Bow-Divide Resource Area to oil and gas developments. The BLM, as an unashamedly pro-development agency, unfortunately

Response to Letter 161

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Also please see general response 1.

169A

...Wyo. Wyoming
...ember 29, 1987

OCT 02 1987

ROUTING SYMBOLS	INIT
ADM	
AMD	
RES	
RMP	
Dist	Date Rec'd

Hillary A. Oden
State Director BLM
Wyoming State Office
Cheyenne, Wyoming

Draft Resource Management Plan/Environmental Impact Statements for the Medicine Bow - Divide Resource Areas

Dear Mr. Oden:

1 After completing three pages of comments on this plan I have decided to be more concise! A much shortened comment is as follows:

I. I strongly recommend the adoption of Alternative "B". Since timber sales and grazing costs cost the taxpayer more than fees received, why not minimize such uses?

II. Maximize income and minimize expenditures: No where in the three volumes did I notice any economic analyses of the contemplated actions. To maximize income and thereby reduce the national debt I suggest:

1. Increase all possible charges. Some examples are:
   A. Annual recreational fees, greater for ATV's and least for hikers.
   B. Substantial fees for Nuisance uses, garbage dumps, utility rights-of-ways, including charges to cover, range improvements etc. Let one example in this category - can you economically justify $4.40 application to motorize when grazing fee do not nearly cover other management costs?
   C. If possible increase fees for "hard rock mining exploration permits and require all land be properly reclaimed.
   D. Train all employees in law enforcement and depositse them. This would enable the BLM to collect more of the fees and reduce vandalism.

To minimize expenditures I would suggest:

1. Reducing overhead costs. Possibly the elimination of seasonal employment. More contractors of work, even eliminating jobs by attrition.
2. More controlled burns to prevent costly wildfire suppression. Allow fires to "burn out" wherever the resources are of low value.

169B

1 Admittedly Congress, by setting fees, does complicate proper management.

Finally a plea for more attention to reducing erosion and subsequent sedimentation of our reservoirs. Rangeland is responsible for 10 percent of all U.S. soil losses: and more than 1 billion acre feet of sediment settles annually in reservoirs, reducing water storage by the same volume. The water that cannot be stored because of lowered reservoir capacity due to silting could irrigate 250,000 acres of wildlife in the dry areas of western U.S. *

I do appreciate being asked for my recommendations.

Sincerely,

William R. Hansmann
Member Pawline District
Advisory Board

*From pages 422 & 424 of "Soils: An Introduction to Soils & Plant Growth" (5th addition) by Donahue, Miller, & Schuckluna. Prentice-Hall Inc. Englewood Cliffs, NJ 07632

171

[The original of this handwritten letter did not reproduce well; therefore it has been typed verbatim for better readability.]

15/11/87

Mr. John Husband
RMP Team Leader
B.L.M.
P.O. Box 670
Rawlins, WY 82201

Dear Mr. Husband:

1 I am writing to you regarding wilderness designation for three BLM's in S.E. Wyoming.

You are lucky to be among the stewards of some of America's most untouched lands. My family have visited Wyoming and we consider the wide open spaces of Southern Wyoming to be truly special...

Unfortunately the BLM has often showed a bias towards cattle grazing and mineral extraction, without much regard to other uses of the land, such as wildlife and plant protection, watershed management or wilderness. I heartily recommend that in addition to Proposal #1A, its response for wilderness designation Sweet Canyon #6A and Sentinel #7A #7A. These 2 areas together would represent a substantial part of BLM holdings in SE Wyoming.

I also urge you to work very hard to protect the Fel Desert west of Pavillo. You need a healthy State which has: 1) a protected forest where killed, the #6B Desert is a marvelous place existing in as undisturbed of conditions. It is up to your agency to decide. Please attempt by actions for any work you do to protect our federal lands.

Sincerely

/s/ Gabriel Ziemli (signed)
8425 N. 56th Ave
Glendale, Az 85302

Response to Letter 169

1. Although many of your suggestions are beyond the scope of the RMP and belong more in the policy tier of our planning system, they are well received. The BLM strives for cost-effectiveness in managing the public lands and resources. We hope the proposed plan addresses many of your concerns, including fire suppression designations and erosion control measures.

Response to Letter 171

1. Thank you for taking the time to review the draft RMP/EIS and send us your comments. Also please see general response 1.

173B

State Director/BLM - 2 - 12/2/87

1

The Assessment generally discusses those species that could be affected by land actions from the Green and North Platte River Systems. We agree that consultation can take place on potential impaction projects when such projects are identified. The assessment states that no land action leading aware of the such projects that may occur during the life of the RMP/EIS. We are the BLM, Seminoe Reservoir Enlargement on the North Platte; and Sandstone Reservoir near Baggs, in the Green River System.

A population of Wyoming toads was discovered this year, and an interagency working group has been assembled to work on Wyoming toad recovery. We noted that several areas of land in Albany County have been identified for potential disposal. Any land exchanges or disposal actions in Albany County need to be reviewed to assure that Wyoming toad potential habitat will not be adversely affected.

The RMP/EIS also discusses rare plants. Please note that both Spoon's Penstemon (Penstemon spoonerii) and persistent small milkvetch (Astragalus lutosiflorus) are Ripley Category 2 candidate species; neither has been proposed for listing. The RMP/EIS identifies potential and candidate plant. Land exchanges near Cheyenne need to be reviewed for potential impacts to the Colorado butterfly plant (Gaura neomexicana coloradensis).

Your efforts to meet our joint responsibilities under the Endangered Species Act are appreciated. Please contact us if we can be of further assistance.

cc: FWS, FHE-61120, Helena MT, Helena, MT
Director, WGFD, Cheyenne, WY
District Manager, BLM, Rawlins, WY

CHT/cth

FHE-61417.R93/corr (ENVT:DIV-MEZ.RPM:11/2/87)

"Take Pride in America"

173A

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Fish and Wildlife Enhancement
Wyoming State Office
2420 Capitol Avenue, Room 1010
Cheyenne, Wyoming 82001

In Reply Refer To:

November 2, 1987

ES:AD Director/Medicine Bow RMP

MEMORANDUM

To: State Director, Wyoming State Office, BLM, Cheyenne, WY

From: State Supervisor, Wyoming State Office, USFWS, Cheyenne, WY
(FWE-61411)

Subject: Medicine Bow/Divide Resource Management Plan Endangered Species Assessment

1

We have reviewed the Medicine Bow/Divide Resource Management Plan Draft Environmental Impact Statement (RMP/DEIS) and Biological Assessment per your request. Based upon the information presented in the Assessment and Bureau of Land Management's (BLM) commitment to consult with us on specific management activities, we concur with your determination of may affect to listed species. However, we would like to comment on the following issues.

We noted that the RMP/DEIS discusses analyzing powerline impacts/mortality accidents on a case-by-case basis. Interior's Raptor Committee has published information and discussion regarding to bald eagles, peregrine falcons, and other large raptors. Bald eagles and peregrine falcons are known to have collisions with powerlines when actively pursuing prey or during weather conditions. To avoid potential electrocution problems, BLM powerlines should be constructed according to the Practices for Raptor Protection on Power Lines: The State of the Art in 1981. If you do not have a copy of this publication, it can be purchased ($5.00/copy) by writing to:

Publications, Treasurer
Raptor Research Foundation
College of Biological Science
1365 Gortner Hall
University of Minnesota
St. Paul, Minnesota 55108

Response to Letter 173

1. Thank you for taking the time to review the draft RMP EIS and send us your professional determination that there would be no effect on listed species. We also appreciate the information on Wyoming toads and the rare plants in the area.

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Appendixes

INTRODUCTION

This appendix summarizes the final federal coal management decisions for the planning area. The process used to arrive at these decisions is briefly explained. This summary is intended to help the public to understand the federal coal management program as it applies to the planning area and to show the requirements that must be met under 43 CFR 3400. These planning decisions will guide the development of the federal coal resource in this area during the remainder of the 1980s and afterward.

To implement competitive coal leasing under regulations contained in 43 CFR 3420, on November 9, 1979, the BLM established a number of federal coal production regions, including the the Green River-Hams Fork Region. That coal region includes the following counties: in Wyoming, Albany, Carbon, Lincoln, Sublette, Sweetwater, and Uinta; in Colorado, Grand, Jackson, Moffatt, Rio Blanco, and Routt. It was estimated that the coal production region contained sufficient federal coal deposits to justify offering coal leases through the competitive leasing process set out in 43 CFR 3420.3 through 3420.6. Much of the planning area is within this coal region.

During its October 9, 1987, meeting in Denver, the Green River-Hams Fork Regional Coal Team discussed the proposal to operate in a lease-by-application mode. As a result of that meeting, the regional coal team decided to offer an additional opportunity for public comment. with the comments received to be considered and responded to before the director of the BLM makes a final decision on the subject.

A decision document on lease-by-application was published in the *Federal Register* of December 28, 1987, along with a request for public comments. Two comments were received. both of which supported leasing-by-application in the Green River-Hams Fork Region. Therefore, since there is limited industry interest in additional tracts of federal coal in this region. coal leasing in the counties listed above will be handled on a lease-by-application basis under 43 CFR 3425. (The governors of Colorado and Wyoming concur in the recommendation.) The regional coal team will continue to be involved in the lease-by-application process as described in section 6c of its charter.

It is expected that this action will result in substantial savings in administrative costs to the federal government and the states of Colorado and Wyoming while a responsive leasing process is retained for the coal industry.

Whether coal is leased through leasing-by-application, activity planning, coal lease exchanges, or preference right lease applications (PRLAs), decisions to lease must be made within the area identified in this document as available for further consideration for coal leasing.

The objectives in managing the federal coal resource in this planning area are (a) to provide for both short- and long-range development of federal coal in an orderly and timely manner, consistent with the new federal coal management program, policies, environmental integrity, national energy needs, and related demands; (b) to identify federal coal that is acceptable for further consideration for leasing; and (c) to identify appropriate mitigation for sensitive areas. This RMP/EIS provides an analysis that can be used in considering areas for new federal coal leasing and proposals for lease modifications, emergency leases, and exchanges.

REQUIREMENTS AND MITIGATION

Introduction

Lessees would be required to develop their federal leases in compliance with applicable federal, state, and local laws and regulations. These would be considered in-place constraints on a lessee's activities.

All areas identified in this document as acceptable for further consideration for coal leasing are subject to the following mitigation requirements:

Cultural Resources

a. Before undertaking any activities that may disturb the surface of the leased lands, the lessee shall conduct a cultural resource intensive field inventory in a manner specified by the authorized officer of BLM on portions of the mine plan area and adjacent areas, or exploration plan area, that may be adversely affected by lease-related activities and which were not previously inventoried at such a level of intensity. The inventory shall be conducted by a qualified professional cultural resource specialist (i.e., archaeologist, historian, or historical architect, as appropriate) approved by the Authorized Officer of the surface managing agency (BLM if the surface is privately owned), and a report of the inventory and recommendations for protecting any cultural resources identified shall be submitted to the Regional Director of the Office of Surface Mining (OSM) and the Authorized Officer of BLM (or only to the authorized officer of BLM if activities are associated with coal exploration outside an approved mining permit area), to protect cultural resources on the leased land. The lessee shall undertake

measures, in accordance with instructions from the Regional Director or Authorized Officer to protect cultural resources on the leased land. The lessee shall not commence the surface-disturbing activities until permission to proceed is given by the Regional Director or Authorized Officer.

b. The lessee shall protect all known cultural resource properties within the lease area from lease related activities until the cultural resource mitigation measures can be implemented as part of an approved mining and reclamation plan or exploration plan.

c. The cost of conducting the inventory, preparing reports, and carrying out mitigation measures shall be borne by the lessee.

d. If cultural resources are discovered during operations under a lease, the lessee shall immediately bring them to the attention of the Regional Director or authorized officer, or the authorized officer of the surface managing agency if the Regional Director is not available. The lessee shall not disturb such resources except as may be subsequently authorized by the Regional Director or authorized officer. Within two (2) working days of notification, the Regional Director or authorized officer will evaluate or have evaluated any cultural resources discovered and will determine if any action may be required to protect or preserve such discoveries. The cost of data recovery for cultural resources discovered during lease operations shall be borne by the surface managing agency unless otherwise specified by the Authorized Officer of BLM or of the surface managing agency (if different).

e. All cultural resources shall remain under the jurisdiction of the United States until ownership is determined under applicable law.

Paleontological Resources

If paleontological resources, either large and conspicuous and/or of significant value are discovered during construction, the find will be reported to the authorized officer immediately. Construction will be suspended within 250 feet of said find. An evaluation of the paleontological discovery will be made by a BLM-approved professional paleontologist within five (5) working days, weather permitting, to determine the appropriate action(s) to prevent the potential loss of any significant paleontological value. Operations within 250 feet of such discovery will not be resumed until written authorization to proceed is issued by the authorized officer. The lessee will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

Black-footed Ferret Habitat

The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e. prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee shall notify the BLM and USFWS and will be required to adhere to any modifications in the mining operation provided by the USFWS and the BLM to protect the endangered species.

The following Black-Footed Ferret Inventory Guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and facilities relating to these developments should be surveyed for prairie dogs before the project is approved. If prairie dogs are found on the proposed site, colonies should be mapped on topographic maps and each colony surveyed using recommended USFWS Black-Footed Ferret Survey Procedures. Ferret searches should be scheduled as close to actual construction as possible and not more than 1 year prior to disturbance to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys or baseline studies for black-footed ferrets are recommended. Results of these surveys will be submitted to the BLM and USFWS for review and clearance. In addition, any burrowing owl nests will be noted and reported to BLM and USFWS.

THE COAL PLANNING PROCESS

Introduction

The federal coal management program established four major steps to be used in the identification of federal coal areas that are acceptable for coal development: (1) identification of coal development potential, including a call for coal resource information (43 CFR 3420.1-2); (2) application of the coal unsuitability criteria; (3) multiple-use conflict evaluation; and (4) surface owner consultation. Collectively, these steps, which are called the "coal screening process" (43 CFR 3420.1-4), are applied in sequence to the review area.

The four major steps and how they were applied to the review area are described in the following sections.

Step 1: Identification of Development Potential Coal

In step 1, areas of coal with potential for development are identified with the use of government drill hole data, data collected through exploration licenses, geological and economic data submitted by coal companies, and interpretations of available geological data from various other sources. Expressions of interest from the coal industry also are used to guide this identification process. Expressions of interest were received for the Atlantic Rim, Indian Springs, North Indian Springs, Wild Horse Draw, and Red Rim areas.

When this screening step is applied, areas without development potential coal and areas with no known interest in development are excluded from further consideration. The areas found to have development potential are closer to existing transportation and/or contain better quality coal than the areas excluded from further consideration.

Table COAL-AP-1 presents coal quality and quantity data on all areas in the planning area that were determined to have coal with development potential. These areas are shown on map 28 in chapter 2.

The Atlantic Rim, China Butte, and Red Rim areas have potential for surface mining only (see maps 48, 49, and 50). The Indian Springs and North Indian Springs areas have potential only for in situ development of coal resources (see maps 51 and 52). There is potential for both surface and subsurface mining in the Hanna Basin area. The Hanna Basin area contains coal with development potential for surface mining (86 million tons) and subsurface mining (105 million tons). Coal in the Wild horse Draw and Northeast Cow Creek has been determined to have no potential for development.

The remaining three screening steps are applied to the coal areas identified in step 1. They are applied in sequence and only to the lands identified as acceptable for coal development in each preceding step.

TABLE COAL-AP-1

COAL RESOURCES IN THE PLANNING AREA
(Revised from draft document)

Coal Area	Federal Acreage	Federal Tonnage (in place)	BTU/lb.[1]	Average Proximate Analysis				Sulfur
				Moisture	Volatiles	Fixed Carbon	Ash	
Red Rim	9,720	40.6×10^6	8,560	22.21%	not available	not available	9.30%	0.45%
China Butte	6,240	73.9×10^6	8,800	25.57%	not available	not available	7.35%	0.56%
Indian Springs	2,500	25.0×10^6	9,626	14.75%	34.00%	42.52%	8.24%	0.33%
North Indian Springs	3,840	25.0×10^6	9,015	17.14%	37.42%	37.75%	7.69%	0.46%
Atlantic Rim	3,650	79.1×10^6	10,277	13.41%	34.47%	43.32%	8.79%	1.02%
Hanna Basin	30,040	191.0×10^6	10,140-10,420	12.58-12.76%	34.30-36.68%	41.82-45.19%	7.93-8.75%	0.46-1.00%

NOTE: All coal quality data are on an "as received" basis.

[1] BTU/lb. = British thermal units per pound.

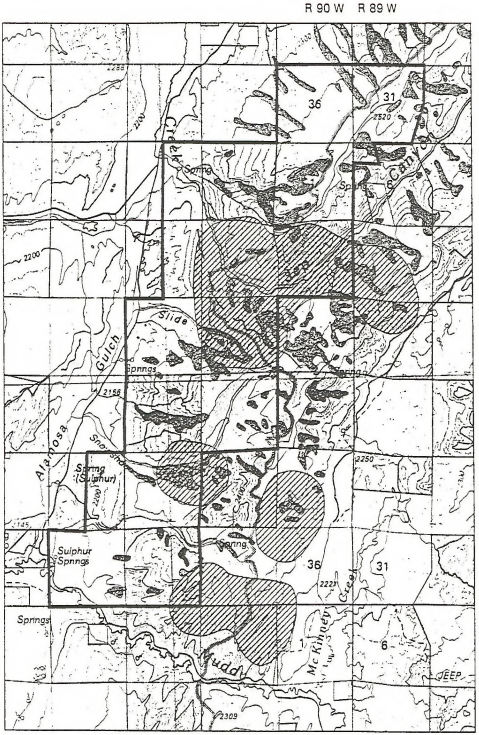
Step 2: Application of Coal Unsuitability Criteria

Introduction

As required by 43 CFR 3461, the 20 coal unsuitability criteria were applied to the areas identified in step 1.

These criteria involve consideration of existing resource values such as scenic areas, natural and historic values, wildlife, floodplains, alluvial valley floors, and other important features. The purposes of this step are (a) to identify areas with key features or environmental sensitivity that would make them unsuitable for surface coal mining or for subsurface coal mining where there would be surface operations and impacts associated with subsurface coal mining, and (b) to identify any appropriate mitigative measures resulting from the application of the unsuitability criteria and exceptions.

The results of the application of the unsuitability criteria to each coal area are described in the following sections. After an expression of interest is filed and prior to tract delineation, the BLM will reinventory a proposed tract area and adjacent land to refine the unsuitability application. If the inventory reveals the presence of species or habitats covered under criteria 9 to 15, the BLM will coordinate with the USFWS and WGFD to determine if any federal coal lands within the proposed tract area should be declared unsuitable.



Coal Area Boundary

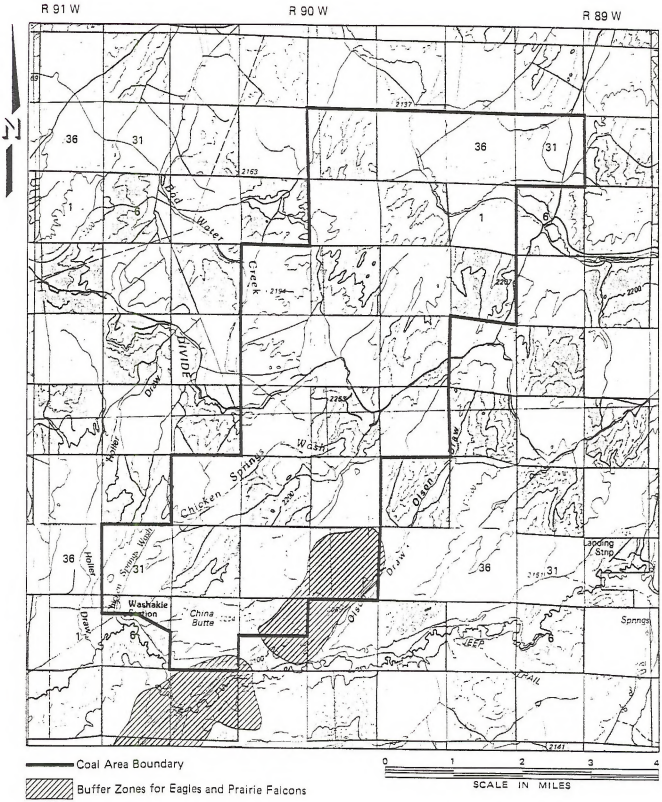
Buffer Zones for Eagles, Prairie Falcons, and Ferruginous Hawks

Aspen Stands

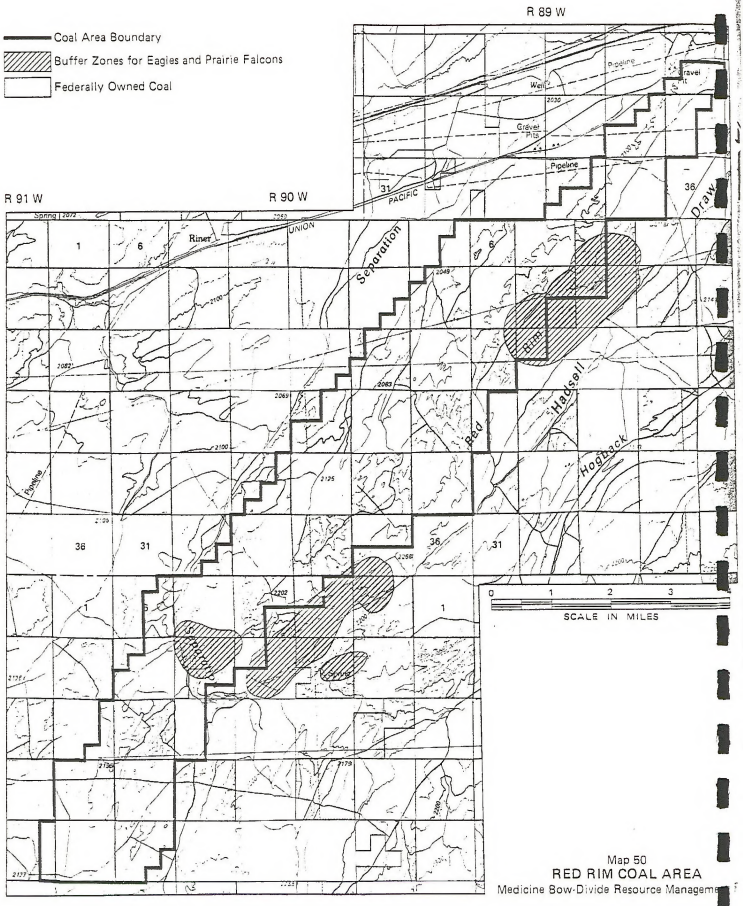
To mitigate disturbance to elk, surface disturbance will not be allowed east of this boundary

Federally Owned Coal

Map 48
ATLANTIC RIM COAL AREA
Medicine Bow-Divide Resource Management Plan

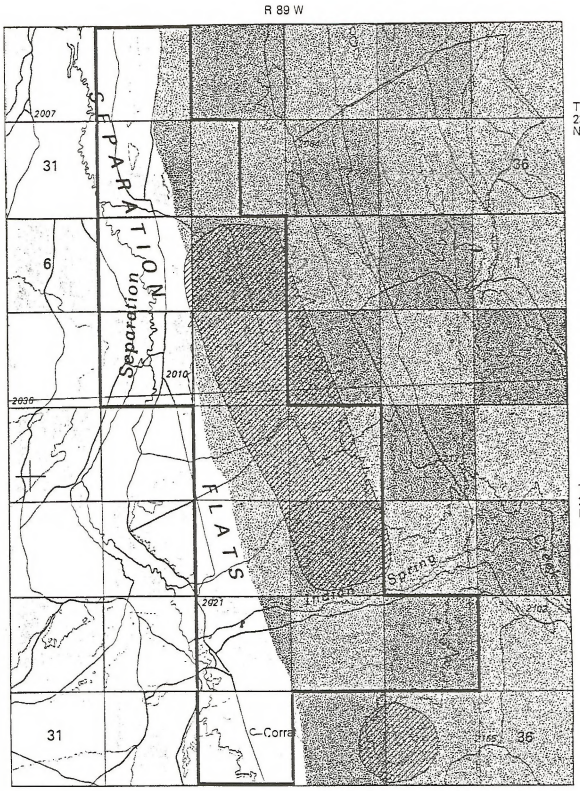


Map 49
CHINA BUTTE COAL AREA
Medicine Bow-Divide Resource Management Plan



Map 50
RED RIM COAL AREA
Medicine Bow-Divide Resource Management

Map 51
INDIAN SPRINGS COAL AREA
Medicine Bow-Divide Resource Management Plan



Map 52
NORTH INDIAN SPRINGS COAL AREA
Medicine Bow-Divide Resource Management Plan

Red Rim

Introduction

No unsuitable areas were identified for the Red Rim area under coal unsuitability criteria 1, 3 through 8, 10, 12, or 17 through 20.

Criterion 2—Rights-of-Way and Easements

In the Red Rim area, most of the rights-of-way crossing the coal areas can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that right-of-way areas are acceptable for coal development, subject to valid existing rights and negotiations for relocating if necessary. Any unforeseen conflicts in these areas should be identified and resolved during the coal activity planning process or during development of mining and reclamation plans.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in the Red Rim area were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11 and 13—Bald and Golden Eagle Nests and Falcon Cliff Nesting Sites

No areas were determined to be unsuitable under criterion 11 or 13. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles and prairie falcons and their associated buffer zones, no surface operations will be allowed in such areas as long as the USFWS determines that the nest is viable (see map 50). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (prairie falcons, March 15 through July 15; golden eagles, February 15 through July 15). In addition, such exceptions will be subject to restrictive placement and type or design of facilities and to seasonal occupancy restrictions, and they may be allowed only with prior written permission of the authorized officer of the BLM after concurrence of USFWS and consultation with WGFD.

Larger disturbances such as upgrading of existing roads or construction of new roads, buildings, or railroad facilities within the buffer zone will not be permitted. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 14—Migratory Bird Habitat

No areas in the Red Rim area were determined to be unsuitable under criterion 14. The area is acceptable for further consideration for leasing subject to the following conditions:

Surface disturbance and occupancy restrictions may be required to protect ferruginous hawk nesting areas within raptor nest concentration areas. Therefore, the lessee shall submit to the BLM, the USFWS, the Office of Surface Mining Reclamation and Enforcement (OSMRE), and the WGFD a habitat recovery and replacement plan for protection or enhancement of ferruginous hawk populations affected by habitat loss or displacement of present or historical habitat. The habitat recovery and replacement plan shall be developed in consultation with the BLM, OSMRE, WGFD, and USFWS and may be submitted before or concurrently with the filing of the mine permit application package. The BLM, OSMRE, WGFD, and USFWS will be allowed a minimum of 120 days to review the habitat recovery and replacement plan and to resolve any conflicts or problems in the plan.

The final habitat recovery and replacement plan must provide the locations, current status and reproductive history (two years minimum) of each nest on or within 2 miles of the lease area and shall indicate the methods to be employed by the lessee to ensure that ferruginous hawk productivity and habitat diversity will not decline in the area.

The plan must include, but not be limited to, consideration of the following points:

Nest site protection during the nesting season.

Enhancement and protection of adjacent nesting habitat that will not be affected by mining disturbance (for example, construction of rock structures or pillars or actions intended to increase habitat diversity).

Relocation of unoccupied nests to enhance other suitable habitat *before* surface disturbance begins.

Restoration of topographic features and vegetative composition to restore nesting habitat and prey diversity affected by mining.

Facilitation of raptor nest protection with private landowners and other public entities on lands adjacent to the lease area.

The plan must include a timetable for implementation of the habitat recovery or replacement plan in relation to the overall mine plan. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any ferruginous hawk nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting hawks.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

On September 27, 1982, the National Wildlife Federation and the Wyoming Wildlife Federation filed a petition with the OSMRE to designate

approximately 9,000 acres as unsuitable. On May 19, 1986, the OSMRE published its decision in the Federal Register. In part, the notice read as follows:

. . .Exercising this discretion, I decline to designate all or any part of the Red Rim petition area as unsuitable for surface coal mining operations, but hereby require that the approval of any Federal mining plan for the petition area include a condition that restricts from development the pronghorn winter range located within the south portion of the petition area until reclamation of pronghorn winter habitat in the north portion of the petition area has been demonstrated to be successful. . . .

Reclamation in the north portion of the petition area shall be demonstrated to be successful when the Department of the Interior finds in writing that the operator/lessee has (1) demonstrated its capability to restore the carrying capacity of the critical winter range, (2) met the requirements of SMCRA, the applicable regulatory program, and the Bureau of Land Management's (BLM's) land-use planning decisions for the petition area, and (3) demonstrated that postmining vegetation would provide for pronghorn forage production equal to or greater than premining conditions. The postmining vegetation (composition and diversity [structural and species-specific]) must approximate premining conditions and be self-renewing when subjected to foraging use. The north portion of the petition area consists of secs. 24, 26, and 34, T. 21 N., R. 89 W.; secs. 4, 6, 8, and 18, T. 20 N., R. 89 W.; and secs. 12, 14, 22, and 24, T. 20 N., R. 90 W. The south portion of the petition area consists of secs. 26, 28, 32, and 34, T. 20 N., R. 90 W.; secs. 4, 6, 8, 18, and 30, T. 19 N., R. 90 W.; and secs. 24 and 26, T. 19 N., R. 91 W.

The decision made by OSMRE is consistent with this RMP/EIS.

Criterion 16—Floodplains

It was determined that the floodplain area of Separation Creek in the Red Rim area can be mined by all or certain stipulated methods of coal mining without substantial threat of loss to people or property and to the natural and beneficial values of the floodplain, either on a coal lease tract or downstream. Examples of mitigation may include relocation of channels during mining and restoration of channel locations after mining, controlling sediment yields and prohibiting spoil dumping in channels, lining channel bottoms, revegetation, and general mined-land reclamation. Therefore, no areas in the Red Rim area were found unsuitable under criterion 16.

China Butte

Introduction

No unsuitable areas were identified in the China Butte area under coal unsuitability criteria 1 through 8, 10, 12, or 17 through 20.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in the China Butte area were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11 and 13—Bald and Golden Eagle Nests and Falcon Cliff Nesting Sites

No areas were determined to be unsuitable under criterion 11 or 13. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles and prairie falcons and their associated buffer zones, no surface operations will be allowed in such areas as long as the USFWS determines that the nest is viable (see map 49). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (prairie falcons, March 15 through July 15; golden eagles, February 15 through July 15). In addition, such exceptions will be subject to restrictive placement and type or design of facilities and to seasonal occupancy restrictions and they may be allowed only with prior written permission of the authorized officer of the BLM upon concurrence of the USFWS and consultation with the WGFD.

Larger disturbances such as upgrading of existing roads or construction of new roads, buildings, or railroad facilities within the buffer zone will not be permitted. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 14—Migratory Bird Habitat

No areas in the China Butte area were determined to be unsuitable under Criterion 14. The area is acceptable for further consideration for leasing subject to the following conditions:

Surface disturbance and occupancy restrictions may be required to protect ferruginous hawk nesting areas within raptor nest concentration areas. Therefore, the lessee must submit to the BLM, the USFWS, the OSMRE, and the WGFD a habitat recovery and replacement plan for protection or enhancement of ferruginous hawk populations affected by habitat loss or displacement from present or historical habitat. The habitat recovery and replacement plan shall be developed in consultation with the BLM, the OSMRE, the WGFD, and the USFWS. It may be submitted before or concurrent with the filing of the mine permit application package. The BLM, the OSMRE, the WGFD, and the USFWS will be allowed

a minimum of 120 days to review the habitat recovery and replacement plan and to resolve any conflicts or problems in the plan.

The final habitat recovery and replacement plan must provide the locations, current status, and reproductive history (two years minimum) of each nest on or within 2 miles of the lease area and shall indicate the methods to be employed by the lessee to ensure that ferruginous hawk productivity and habitat diversity will not decline in the area.

The plan must include, but not be limited to, consideration of the following points:

Nest site protection during the nesting season.

Enhancement and protection of adjacent nesting habitat that will not be affected by mining disturbance (for example, construction of rock structures or pillars or actions intended to increase habitat diversity).

Relocation of unoccupied nests to enhance other suitable habitat before surface disturbance begins.

Restoration of topographic features and vegetative composition to restore nesting habitat and prey diversity affected by mining.

Facilitation of raptor nest protection with private landowners and other public entities on lands adjacent to the lease area.

The plan must include a timetable for implementation of the habitat recovery or replacement plan in relation to the overall mine plan. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new ferruginous hawk nests should become established on or within 1 mile of the lease areas during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting hawks.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in the China Butte area were determined to be unsuitable under criterion 15. The primary habitat considerations in the China Butte coal area are crucial winter range for antelope and deer and sage grouse leks.

If all or a significant portion of the crucial winter range for one or more of the big game species involved were to be mined or made available for mining during one time span, there probably would be significant long-term impacts on the survival of the herds. However, in considering the exceptions to the criterion, the BLM determined that there would not be significant long-term impacts on the species being protected under certain stipulated methods of mining (such as habitat recovery, limited surface occupancy, or other mitigation requirements) or under sequential mining over a long period to maintain a proper mix and balance between areas disturbed by mining and undisturbed areas.

Further, mitigative measures would be combined with appropriate mining methods to temper the impacts of mining in crucial winter range for big game. Sufficient forage would be provided to maintain WGFD target populations for wintering antelope and deer in the area. Therefore, these areas were determined to be acceptable for coal development with certain stipulated methods of mining and mitigation requirements under a concept of long-range leasing and development.

It was determined that grouse habitat areas are acceptable for coal development with stipulations and mitigation requirements for habitat improvement, development, and reclamation.

The China Butte coal area is acceptable for further consideration for leasing subject to the following conditions:

The lessee shall not disturb the area within ¼ mile of the center of sage grouse strutting/nesting complexes except on areas that are to be mined. Any proposals for surface facilities or activities within a 2-mile radius of the center of sage grouse strutting/nesting complexes will be subject to seasonal occupancy restrictions as determined to be feasible by the authorized officer of the BLM. This measure may partially mitigate losses of sage grouse.

The lease holder shall attempt to relocate sage grouse strutting/nesting complexes that would be destroyed by the proposed action. Relocation efforts are to be coordinated with the BLM and the WGFD. This measure may partially mitigate a reduction in the sage grouse population of the area. (See the wildlife habitat portion of the multiple-use conflict evaluation later in this appendix for reclamation requirements.)

Criterion 16—Floodplains

It was determined that the floodplain area of Fillmore Creek can be mined by all or certain stipulated methods of coal mining without substantial threat of loss to people or property and to the natural and beneficial values of the floodplain, either on a coal lease tract or downstream. Examples of mitigation may include relocation of channels during mining and restoration of channel locations after mining, control of sediment yields and prohibition of spoil dumping in channels, lining channel bottoms, revegetation, and general mined-land reclamation. Therefore, no areas in the China Butte area were found unsuitable under criterion 16.

Indian Springs and North Indian Springs

Introduction

No unsuitable areas were identified in the Indian Springs and North Indian Springs areas under coal unsuitability criteria 1, 3 through 8, 10, 12, or 17 through 20.

Criterion 2—Rights-of-Way and Easements

Most of the rights-of-way crossing the coal areas in Indian Springs and North Indian Springs can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that right-of-way areas are acceptable for coal development, subject to valid existing rights and negotiations for relocating if necessary. Any unforeseen conflicts in these areas should be identified and resolved during the coal activity planning process or during development of mining and reclamation plans.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in Indian Springs and North Indian Springs were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11 and 13—Bald and Golden Eagle Nests and Falcon Cliff Nesting Sites

No areas were determined to be unsuitable under criterion 11 or 13. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles and prairie falcons and their associated buffer zones, no surface operations will be allowed in such areas as long as the USFWS determines that the nest is viable (see maps 51 and 52). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (prairie falcons, March 15 through July 15; golden eagles, February 15 through July 15). In addition, such exceptions will be subject to restrictions on location, type or design of facilities, and season of occupancy, and they may be allowed only with prior written permission of the authorized officer of the BLM after concurrence of USFWS and consultation with WGFD.

Larger disturbances such as upgrading of existing roads or construction of new roads, buildings, or railroad facilities within the buffer zone will not be permitted. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 14—Migratory Bird Habitat

No areas in the Indian Springs and North Indian Springs areas were determined to be unsuitable under criterion 14. The area is acceptable for further consideration for leasing subject to the following conditions:

Surface disturbance and occupancy on about 6,000 acres will be limited to very small-scale and seasonal uses because active ferruginous hawk nests are present. This area includes all of the Indian Springs area and all of the North Indian Springs area except T. 22 N., R. 89 W., section 8, W½E½, W½, and section 28, SW¼. Small surface disturbances such as pipelines, restricted use roads, and raptor-safe power lines may be allowed in the area so long as they are consistent with all current planning and management decisions and mitigation, and provided that no human activity or surface disturbance occurs during the nesting season (March 15 through July 31) and that the nest substrate (cliff, rimrock, tree, or other substrate) is not modified to disturb nesting ferruginous hawks.

Larger disturbances like upgrading of existing roads or construction of new roads, buildings, or railroad facilities within nest buffer zones would not be permitted.

A lease would be subject to the following mitigation:

a. Any federal coal recovered from the Indian Springs Tract will be recovered by in situ coal development methods only.

b. The lessee must submit to the BLM, the USFWS, the OSMRE, and the state of Wyoming (WGFD and DEQ) a habitat recovery and replacement plan for protection or enhancement of ferruginous hawk populations affected by habitat loss or displacement from present or historical habitat. The habitat recovery and replacement plan shall be developed in consultation with the BLM, the OSMRE, the state of Wyoming (WGFD and DEQ), and the USFWS. It may be submitted before or concurrently with the filing of the mine permit application package. However, because serious impacts can result from an inadequate plan, the BLM, the OSMRE, the state of Wyoming (WGFD and DEQ), and the USFWS would be allowed a minimum of 120 days to review the habitat recovery and replacement plan and to resolve any conflicts or problems in the plan. Close coordination among the BLM, the OSMRE, the state of Wyoming (WGFD and DEQ), and the USFWS during development of the plan will minimize the time needed for review and concurrence.

c. The final habitat recovery and replacement plan must provide the locations, current status, and reproductive history (two years minimum) of each nest on or within 2 miles of the lease area and shall indicate the methods to be employed by the lessee to ensure that ferruginous hawk productivity and habitat diversity will not decline in the area.

Where rock features are disturbed, reclamation shall ensure replacement of the habitat in kind.

d. For the protection of nesting ferruginous hawks and their associated buffer zones, no surface operations will be allowed in such areas. If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (March 15 through July 31). In addition, such exceptions will be subject to restrictive placement and type or design of facilities and to seasonal occupancy restrictions, and they may be allowed only with prior written permission of the authorized officer of the BLM upon concurrence of the USFWS and the WGFD.

Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activ-

ities must be monitored to determine changing protection requirements. If any new ferruginous hawk nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting hawks.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in Indian Springs or North Indian Springs have been determined to be unsuitable for in situ coal development methods under criterion 15. However, surface disturbances and occupancy on approximately 3,000 acres of pronghorn crucial winter range will be limited to very small-scale and seasonal uses (see map 46 and the wildlife habitat portion of the multiple-use conflict evaluation later in this appendix for reclamation requirements).

Criterion 16—Floodplains

It was determined that in situ coal development of Indian Springs and North Indian Springs could be undertaken without substantial threat of loss of life or property. Therefore, no areas were found unsuitable under Criterion 16 (floodplains).

Atlantic Rim

Introduction

No unsuitable areas were identified in the Atlantic Rim area under coal unsuitability criteria 1 through 8, 10, 12, 16 through 18, or 20.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in the Atlantic Rim area were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11, 13, and 14—Bald and Golden Eagle Nests, Falcon Cliff Nesting Sites, and Migratory Bird Habitat

No areas were determined to be unsuitable under criterion 11, 13, or 14. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles, prairie falcons, and ferruginous hawks and the buffer zones associated with the nests of these species, no surface coal mining operations will be allowed in such areas (see map 48). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or small scale surface facilities, no surface-disturbing activities will be permitted in nesting areas or buffer zones during breeding and nesting seasons (eagles, February 15 through July 15; other raptors, March 15 through July 15). Such exceptions may be allowed only with prior written permission of the authorized officer of the BLM after concurrence of the USFWS and consultation with the WGFD. In addition, such exceptions will be subject to restrictions on locations, type or design of facilities, and season of occupancy.

Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in the Atlantic Rim area were determined to be unsuitable under criterion 15. The primary habitat consideration in the coal area is crucial winter and yearlong range for elk. The elk rely on a total yearlong range of 784,000 acres, of which about 327,000 acres is winter range and about 131,000 acres (17% of the total range) is crucial habitat, as defined under this criterion. Approximately 3,556 federal acres of this crucial habitat lie within this coal area.

The Atlantic Rim area is acceptable for further consideration for leasing subject to the following conditions:

The area will be subject to mitigation and reclamation measures for the protection of wintering and yearlong resident elk. Any proposals of the lessee to conduct mining operations or construct mining-related surface facilities within the Atlantic Rim coal area will be subject to stipulations for specific placement, design, and type of facilities; management of elk forage; and restrictions on the level of mining and human activity. These stipulations and restrictions will be developed in consultation with the WGFD and in conference with the USFWS, the Wyoming Wildlife Feceration, and the National Wildlife Federation. The stipulations and restrictions will address the following situations:

a. Elk need to get to the north end of the Atlantic Rim during severe winters. Mining activity will be confined to west-facing slopes, and no activity will be permitted east of the line indicated on map 48. This will keep in people and mining activity out of sight of elk moving to the north via the east ridge. Impacts on resident elk will be minimized throughout the year.

b. Aspen patches are the primary thermal and hiding cover for resident elk. These patches are primarily in and along the major drainages of the Atlantic Rim area. So that impacts on the elk herd can be minimized and the hydrologic integrity of the drainages in which aspen patches occur can be maintained, aspen patches in the major drainages will be protected from disturbance by mining or related support facilities (see map 48).

c. Routes for access to Atlantic Rim and for transportation of coal from the area will be restricted to those found acceptable through consultation with the WGFD and other interested parties. This will minimize effects on wildlife while allowing consideration of the coal market and any foreseeable coal development in the area. Given present knowledge, the Twenty-Mile Road from Rawlins to the west side of the Atlantic Rim coal area appears to be the least environmentally sensitive route.

d. Considerable amounts of winter forage would be unavailable to elk because of mine disturbance and activity. Sufficient forage would be provided to maintain WGFD target populations for wintering elk on the Atlantic Rim portion of the Baggs Elk Crucial Winter Range. The degree of overlap of foraging areas, and thus the dietary overlap between elk and cattle, will be determined, and adjustments in livestock management will be made if necessary. Other mechanisms for replacement of forage, such as fertilization or vegetation manipulation, also will be considered. Artificial feeding will not be considered for forage replacement. The best mechanism or combination of mechanisms will be used to reduce impacts to the elk population.

e. Since the potential pit sites are part of the crucial elk winter range, human activity should be restricted to the mine site as much as possible. A threshold level of mining activity will be identified beyond which the elk population would be displaced from the winter range. Among other items, this threshold level of activity may address the number of separate pits operated simultaneously, the total amount of acreage disturbed at any given time, and the sequence of pit operations.

Application of this unsuitability criterion was done in consultation and coordination with other governmental agencies and public groups, as discussed in chapter 5 of this document.

Criterion 19—Alluvial Valley Floors

When the coal unsuitability review for the project area was conducted, possible alluvial valley floor areas were identified in two drainages that are in or near the project area—Separation Crsek (in Jep Canyon) and Muddy Creek.

No areas were determined to be unsuitable under criterion 19. The area is acceptable for further consideration for leasing subject to the following conditions:

In identified possible alluvial valley floor areas or in other areas near them where the proposed coal mining could interrupt or intercept water flow to farming areas along the drainages, mining will be permitted only with mitigative measures for alluvial valley floor protection that are made a part of an approved mine plan. The state of Wyoming usually identifies alluvial valley floor areas and mitigative measures (if possible) during the mining plan approval and mine permitting stage.

Hanna Basin

Introduction

Coal unsuitability criteria were applied to the unleased federal coal with development potential in the Hanna Basin. No unsuitable areas were identified under coal unsuitability criteria 1, 4 through 8, 10, 12, or 17 through 20.

Criterion 2—Rights-of-Way and Easements

Most of the rights-of-way crossing the coal areas in Hanna Basin can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that right-of-way areas are acceptable for coal development, subject to valid existing rights and negotiations for relocating if necessary, along with appropriate stipulations and consistency with current planning and management decisions. Any unforeseen conflicts in these areas should be identified and resolved during the coal activity planning process or during development of mining and reclamation plans.

Criterion 3—Public Roads, Cemeteries, Buildings, and Occupied Dwellings

Split estate coal lands in T. 22 N., R. 81 W., sec. 18, W½NE¼NW¼, were determined to be unsuitable under criterion 3 because of an occupied dwelling on the parcel. Approximately 20 acres containing 400,000 tons of coal are unsuitable.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in Hanna Basin were determined to be unsuitable under criterion 9. Some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets inhabit the areas. The necessary searches and consultation with the USFWS will be conducted during coal activity planning.

Some survey of bald eagle wintering areas and areas used during migration has been conducted. The WGFD has identified a bald eagle wintering area along the Medicine Bow River adjacent to the Hanna Basin area, but additional fieldwork is required to document the size of the area and its importance. Data from BLM surveys during 1978 and 1979 indicate that eagles made little use of this area. A possible additional area has been identified along the North Platte River. No bald eagle nests have been identified.

No recent sightings of peregrine falcons have been documented for this area. Some limited potential for nesting peregrine falcons exists along Seminoe Reservoir, Medicine Bow River, and possibly Hanna Draw because of the presence of perennial streams and associated nesting sites.

Criteria 11, 13, and 14—Bald and Golden Eagle Nests, Falcon Cliff Nesting Sites, and Migratory Bird Habitat

After filing of an expression of interest and before tract delineation, the BLM would reinventory any proposed tract and adjacent land to refine the application of criteria 11, 13, and 14. If the inventory should reveal the presence of species or habitats involving these criteria, the BLM would coordinate with the USFWS and the WGFD to determine if any federal coal lands within the proposed tract area should be declared unsuitable.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in Hanna Basin were determined to be unsuitable under criterion 15. The primary habitat considerations in the Hanna Basin coal area are sage grouse leks and crucial winter range for antelope and deer.

If all or a significant portion of the crucial winter range for one or more big game species were to be mined or made available for mining during one time span, there probably would be significant long-term impacts on the survival of the herds. However, in considering the exceptions to the criterion, the BLM determined that there would not be significant long-term impacts on the species being protected under certain stipulated methods of mining (such as habitat recovery, limited surface occupancy, or other mitigation requirements) or under sequential mining over a long period to maintain a proper mix and balance between areas disturbed by mining and undisturbed areas.

Further, mitigative measures would be combined with appropriate mining methods to temper the impacts of mining in crucial winter range for big game. Therefore, these areas were determined to be acceptable for coal development with certain stipulated methods of mining and mitigation requirements under a concept of long-range leasing and development.

It was determined that grouse habitat areas are acceptable for coal development with stipulations and mitigation requirements for habitat improvement, development, and reclamation.

The Hanna Basin Coal area is acceptable for further consideration for leasing subject to the following conditions:

The lessee shall not disturb the area within ¼ mile of the center of sage grouse strutting/nesting complexes except on areas that are to be mined. Any proposals for surface facilities or activities within a 2-mile radius of the center of sage grouse strutting/nesting complexes will be subject to seasonal occupancy restrictions as determined to be feasible by the authorized officer of the BLM. This measure may partially mitigate losses of sage grouse.

The lease holder shall attempt to relocate sage grouse strutting/nesting complexes that would be destroyed by the proposed action. Relocation efforts are to be coordinated with the BLM and the WGFD. This measure may partially mitigate a reduction in the sage grouse population. (See the wildlife habitat portion of the multiple-use conflict evaluation later in this appendix for reclamation requirements.)

Criterion 16—Floodplains

It was determined that most identified floodplain areas in Hanna Basin can be mined without substantial threat of loss to people or property or to the natural and beneficial values of the floodplain, either on a coal lease tract or downstream. Examples of mitigation may include control of sediment yields and prohibition of spoil dumping in channels, lining channel bottoms, revegetation, and general mined-land reclamation.

The floodplain of the Medicine Bow River in T. 23 N., R. 81 W., sec. 6, was found unsuitable for mining under criterion 16. This involves approximately 10 acres containing 15,000 tons of federal coal. All other floodplain areas in the Hanna Basin were determined to be acceptable with mitigation, as discussed above.

Step 3: Multiple-Use Conflict Evaluation

Introduction

As required by 43 CFR 3420.1-4(e)(3), multiple land-use decisions were made on areas found suitable upon application of the unsuitability criteria. Step 3, evaluation of multiple-use conflicts, provides for the protection of locally, regionally, or nationally important or unique resource values and land uses not included in the unsuitability criteria.

Groundwater and Surface Water Resources

Potential impacts on groundwater and surface water resources are of concern in the Indian Springs, North Indian Springs, and Atlantic Rim areas. Mitigation would be applied in those areas to reduce the effects due to possible aquifer removal, interruption of groundwater flow, change in groundwater flow from replaced overburden, water quality changes from spoil material leaching and mixing between aquifers, and subsidence and/or fracturing of overlying rocks.

No areas are unacceptable; however, the following mitigation requirements would be applied:

The lessee shall prepare and submit to the BLM, concurrently with the filing of a permit application package, a hydrologic mitigation study. The study must include a factual statement of the following:

a. Identification of all affected surface water, water table (unconfined), and artesian (confined) waters, including the location and direction of movement of all groundwater.

b. Appropriate characteristics of the waters, which might include yield or flow; conductance; pH; temperature; alkalinity; total dissolved solids; dissolved amounts of such elements as sulfates, chlorides, barium, cadmium, copper, iron, lead, radioactive materials, turbidity; and total dissolved oxygen.

c. Identification of development activities that would affect the above waters, and the probable impact on such waters from each activity.

d. A discussion of the interrelationships between surface water and groundwater in the project area and the likely effects on this relationship from development of the Federal coal.

e. Identification of proposed mitigative measures to reduce the impacts identified in (c) above.

f. A plan for monitoring surface water and groundwater conditions in the project area and downstream from the project. The water quality standards of the Wyoming Department of Environmental Quality and the U.S. Public Health Service shall be used where applicable.

In addition, the following mitigation requirement would be applied in the Indian Springs and North Indian Springs areas.

In accordance with state law and regulation, the permit application package submittal shall include a detailed description of the effects of possible mined land subsidence and faulting. This must include the proposed measures to be taken to prevent or minimize the effects of subsidence and faulting and procedures that will be taken in terms of backfilling, grading, contouring, etc., in the event that any subsidence or faulting occurs.

Wildlife Habitat

Loss of wildlife habitat for varying lengths of time on surface-mined areas, roads, railroads, and facilities is unavoidable. In addition to the loss of habitat, some areas would become unusable by animals that are intolerant of human activity. No additional areas have been determined to be unacceptable; however, the following mitigation requirements would be applied in the Indian Springs, North Indian Springs, Atlantic Rim, Red Rim, China Butte, and Hanna Basin areas:

A. Recovery of wildlife habitat on the project area will be required. The lessee will be required to mitigate habitat loss caused by surface coal mining operations in the project area. Where crucial habitat is disturbed, reclamation will ensure replacement of that habitat in kind. Mitigation methods may require the lessee to employ techniques for wildlife forage manipulation or intensive wildlife habitat management.

B. Habitat recovery may not be completely feasible in the project area; therefore, recovery or replacement may be accomplished on lands outside the project area in combination with recovery and replacement methods on suitable lands within the project area. Such habitat recovery provisions must be acceptable to the BLM, the WGFD, and the USFWS. Lands outside the project area for such habitat recovery may be made available through the surface management agency, the state, or the lessee. In regard to the above, the lessee will be required to develop a habitat recovery and replacement plan designed to protect and/or enhance wildlife habitat. This plan shall be prepared before mining plan approval, in consultation with and subject to approval by the BLM, the USFWS, the OSMRE, and the state of Wyoming. The habitat recovery and replacement plan shall include, but will not be limited to, the following provisions:

1. A detailed description of the methods selected by the lessee to mitigate habitat loss, together with a comparative analysis of alternate methods that were considered and rejected by the lessee, and the rationale for the decision to select the proposed methods. The replacement may include, but is not limited to, the following techniques:

   a. Increasing the quantity and quality of forage available to wildlife

   b. The acquisition of wildlife crucial habitats

   c. Manipulation of wildlife habitat for selected wildlife species

   d. Recovery, replacement, or protection of important wildlife habitat by selected methods such as modifying or eliminating fencing. Construction of new fences will be kept to a minimum on winter ranges and within migration routes. Fencing will be coordinated with the WGFD to ensure protection of these resources.

   e. Wildlife watering developments.

2. A timetable giving the periods of time that will be required to accomplish the habitat recovery or replacement plan and showing how this timetable relates to the overall mining plan.

3. An evaluation of the final plan by the state of Wyoming. The state will comment on the methods selected and the techniques to be employed by the lessee and may recommend alternate recovery or replacement methods. If the state has recommended alternate methods, the lessee shall consider the state's recommendations and, if the lessee rejects the state's recommendations, the lessee shall indicate its reasons as required by provision B, above. If no state comment is included in the plan, the lessee shall verify its consultation with the state and the plan may be considered without state comment.

4. A habitat analysis of the lease area (including a 2-mile buffer around the lease area) and those areas considered for off-site mitigation. The analysis shall identify the following features:

   a. Distribution of important wildlife species (game, nongame, sensitive species, species of high federal interest, and threatened or endangered species)

   b. Distribution of important standard habitat types

Fisheries, Water Quality, and Recreation

Proposed coal development could cause significant adverse impacts at the Seminoe Reservoir, which is managed by the Bureau of Reclamation. Adverse impacts that could result from coal development are (a) interruption or interception of groundwater and surface water systems; (b) water transfer between the reservoir and mining pits, which could degrade water quality and impair fisheries habitat, recreational activities, and downstream water uses; and (c) impairment of scenic quality through visual intrusion of the mining operation and related recreational activities. Further analysis is available in the "Amendment to the Hanna Basin Management Framework Plan and Draft Environmental Assessment" (USDI, BLM and USDI, GS 1984).

For the protection of the water values of Seminoe Reservoir, the BLM and the Bureau of Reclamation have jointly determined that no surface occupancy will be allowed within a 200-foot buffer zone between any surface coal mining operation and the high-water design elevation of 6,363.7 feet. Approximately 3,420 acres containing 22.4 million tons of coal are unacceptable because of this conflict.

Producing Oil and Gas Areas

Either surface or subsurface coal mining could conflict with producing oil and gas areas. Competitive federal coal areas covered by existing oil and gas leases are acceptable for further consideration for surface or subsurface coal leasing unless or until it is determined that coal development will interfere with producing oil and gas field operations or that such conflicts cannot be mitigated. If producing oil and gas fields are established in any of the competitive federal coal areas before coal leases are issued, and if it is determined that unmitigable conflicts would exist between coal development and oil and gas operations, coal leasing will be deferred on the affected areas.

Lands Near Populated Areas

Federal coal lands in T. 22 N., R. 81 W., sec. 16, NW¼ NW¼, and sec. 18, S½ NW¼, are near the towns of Hanna and Elmo. The impacts of coal development on the residents of Hanna and Elmo are a concern. In addition, there are structures on federal land in section 18 related to Hanna's water system.

These lands have been determined to be acceptable for further consideration subject to mitigation. Specific mitigative measures to protect the quality of life and provide for improvements on the land would have to be acceptable to the residents of Hanna and Elmo. These measures should be worked out in coordination with local residents as soon as the BLM receives any possible lease proposal.

Step 4: Surface Owner Consultation

Section 714 of the Surface Mining Control and Reclamation Act (SMCRA) requires that the BLM consult with certain "qualified" owners of "split estate" lands (privately owned surface over federally owned coal) when surface mining of the federal coal is being considered.

In step 4 of the coal planning process, surface owners who may be "qualified" under section 714 of SMCRA are asked to state their opinion for or against surface coal mining on their land. Areas where a significant number of qualified owners oppose surface mining of federal coal are eliminated from consideration for this mining method.

This step does not apply to areas where only subsurface mining methods are concerned. It involves only split estate lands within competitive federal coal areas that remain acceptable for development by surface mining methods after the multiple-use conflict evaluation has been conducted.

The Red Rim, Indian Springs, North Indian Springs, and China Butte areas do not contain split estate lands as defined in this section.

Split estate lands in the Atlantic Rim coal area are as follows:

T. 18 N., R. 90 W., sec. 28, W½NW¼, SE¼NW¼, NE¼SW¼

T. 19 N., R. 89 W., sec. 31, all.

Split estate lands in the Hanna Basin coal area are as follows:

T. 21 N., R. 82 W., sec. 4, lots 1 and 2, S½NE¼

T. 22 N., R. 81 W., sec. 18, NE¼NW¼

T. 23 N., R. 80 W., sec. 4, lots 3 and 4, S½NW¼, SW¼ W½SE¼, SE¼SE¼

T. 23 N., R. 84 W., sec. 23, W½SE¼; sec. 35, NW¼NW¼

These split estate lands are owned by four qualified surface owners, all of whom were contacted by letter. Replies from three of the qualified surface owners indicated that they were not against surface mining. The fourth qualified surface owner did not reply. The letter sent by the BLM stated that if no reply was received, we would assume the surface owner had no preference against surface mining. Therefore, no lands were eliminated from further consideration on the basis of surface owner consultation.

LIVESTOCK GRAZING APPENDIX ADDITIONS AND CORRECTIONS

CORRECTIONS TO TABLES

The tables in the Livestock Grazing appendix to the draft Medicine Bow-Divide RMP/EIS contained a few omissions and errors. Corrected information for tables LVGR-AP-1, LVGR-AP-4, and LVGR-AP-6 is included in these pages.

CORRECTION TO "RESERVOIRS" SECTION

On page 374 of the draft document (right column, last paragraph), a sentence beginning on line 8 says that all reservoirs would be fenced, and water would be piped to a trough nearby. Although such practices would be desirable where practicable, they are not always possible. Where water can be piped to nearby troughs that can be used for livestock watering, fencing the reservoir can protect riparian vegetation from damage by trampling. However, in some cases the fluctuation in water levels and the characteristics of soils and vegetation preclude development of high quality riparian habitat adjacent to the reservoir. In addition, location of the reservoir or the season in which it would be used by livestock may make it impossible to pipe water to nearby troughs. That sentence should be replaced by the following: **Each new reservoir would be reviewed for suitability for fencing and installation of water troughs.**

CORRECTIONS TO "STANDARD OPERATING PROCEDURES" SECTION

In the section about "mitigation" on page 410 of the draft RMP/EIS (right column, paragraph 4), we said that before any part of this plan is implemented that could affect a threatened or endangered species or its habitat, a "threatened" or "endangered" species clearance may be required. This should be changed to say that such a clearance **will be required.**

Paragraph 6 of the right column of page 410 contained a statement that watering troughs could include bird ramps where the need is identified for wildlife use. This should be changed to say that bird ramps would be included **in all watering troughs.**

CORRECTIONS FOR TABLE LVGR-AP-1

LIVESTOCK GRAZING ALLOTMENT INFORMATION

Allotment Number	Allotment Name	Public Land (acreage)	Allotment Category M, I, C[1]	Number of Operators	Livestock Kind[2]	Season of Use	Active Preference (AUMs)[3]	Average Five-Year Licensed Use	Current Production (AUMs)[4]
Page 346 of Draft RMP/EIS									
0322	Spring Creek	10,387	M	1	C	05/16 - 11/09	1,912	1,462	1,816
0323	Black Canyon	14,355	I	1	C	04/25 - 11/25	2,106	2,086	2,106
Page 348 of Draft RMP/EIS									
0824	North Area	12,605	C	2	C,S	03/01 - 02/29	2,437	1,699	1,629
0825	Slate Ridge	4,931	C	1	C,H	03/01 - 02/29	644	715	723[5]
Page 357 of Draft RMP/EIS									
Revised totals for the Medicine Bow Grazing EIS Area		**1,005,684**					**161,311**	**147,024**	**157,208**

[1] The grazing allotments are grouped into categories, and a set of management objectives is attached to each category, as follows: category "M," maintain or improve present management; category "I," enhance and improve present management; category "C," manage custodially to prevent allotment deterioration.

[2] "Livestock kind" refers to the type of livestock on license over a five-year period, 1981 through 1985. C = cows; H = horses; S = sheep; Y = yearlings.

[3] The combined number of animal unit months adjudicated to the operator(s) of a particular allotment.

[4] The estimated number of AUMs an allotment can support. Except where otherwise noted, estimates are based on the Missouri River Basin range survey of 1962 and on professional judgment.

[5] The estimated number of AUMs an allotment can support. Estimates are based on the 1986 Medicine Bow Resource Area range inventory.

CORRECTIONS FOR TABLE LVGR-AP-4

PROPOSED RANGE IMPROVEMENTS BY ALLOTMENT FOR ALTERNATIVES B, C, AND D

Allotment Number	Allotment Name	Grazing System	Spring Deferments	Fences (miles)	Reservoirs	Wells	Pipeline (miles)	Spring Developments	Snow Fences	Vegetation Manipulation (acres)	Seeding (acres)	Riparian Fencing (miles)	Fencing of Existing Reservoirs
Page 388 of Draft RMP/EIS													
Alternative C													
0301	Pathfinder	yes	no	5.00	2	0	0.0	0	0	560	0	0.0	0
0303	Canyon Creek	yes	no	0.00	1	0	0.0	0	0	3,437	0	0.0	0
0311	Bates Benchmark	no	yes	0.00	0	1	0.0	1	0	793	0	0.0	0
Page 387 of Draft RMP/EIS													
Alternative C (continued)													
0335	Shirley Mountain	yes	no	14.00	0	0	0.0	0	0	1,000	0	0.0	0
Page 396 of Draft RMP/EIS													
Alternative D													
0316	Dry Creek Rim	no	yes	0.00	0	0	0.0	0	0	0	0	0.0	0
0323	Black Canyon	yes	no	3.50	2	0	0.0	2	0	0	0	0.0	0
Page 397 of Draft RMP/EIS													
Alternative D (continued)													
0329	Lost Creek	no	yes	1.50	0	0	0.0	0	0	1,000	0	.5	3
0335	Shirley Mountain	yes	no	14.00	0	0	0.0	0	0	1,000	0	5.0	0

NOTE: Totals for this table are unchanged.

CORRECTIONS FOR TABLE LVGR-AP-6

PROJECTED LONG-TERM ECOLOGICAL CONDITION BY ALLOTMENT FOR EACH ALTERNATIVE

Allotment Number	Allotment Name	Preference (AUMs)	Current Production (AUMs)	Potential Forage (AUMs)	Long-term Change in Ecological Condition (acres) Poor	Fair	Good	Excellent	Long-term Predicted Livestock Production (AUMs)	Authorized Use (AUMs)
Page 413 of Draft RMP/EIS										
Alternative A										
0824	North Area	2,437	1,629	2,118	25	1,460	3,417	124	1,629	2,590
Page 422 of Draft RMP/EIS										
Corrected totals for Alternative A		**161,311**	**157,256**	**217,694**	**32,290**	**315,657**	**515,441**	**69,903**	**151,817**	**161,464**
Page 423 of Draft RMP/EIS										
Alternative B										
0322	Spring Creek	1,912	1,816	2,292	29	1,130	7,065	1,709	2,554	1,890
0323	Black Canyon	2,106	2,106	2,738	31	3,318	4,940	921	2,317	1,923
0335	Shirley Mountain	3,655	3,265	6,969	75	5,499	3,707	1,190	4,253	3,416
Page 424 of Draft RMP/EIS										
Alternative B (continued)										
0824	North Area	2,437	1,629	2,118	9	1,030	3,372	615	1,792	2,037
Page 433 of Draft RMP/EIS										
Corrected totals for Alternative B		**161,311**	**157,208**	**216,678**	**8,255**	**230,756**	**558,793**	**135,487**	**188,950**	**146,995**
Page 434 of Draft RMP/EIS										
Alternative C										
0322	Spring Creek	1,912	1,816	2,292	29	1,130	7,065	1,709	2,554	2,480
0323	Black Canyon	2,106	2,106	2,738	31	3,318	4,940	921	2,317	2,296
0335	Shirley Mountain	3,655	3,265	6,969	75	5,499	3,707	1,190	4,168	4,078

CORRECTIONS FOR TABLE LVGR-AP-6 (Continued)

PROJECTED LONG-TERM ECOLOGICAL CONDITION BY ALLOTMENT FOR EACH ALTERNATIVE

Allotment Number	Allotment Name	Preference (AUMs)	Current Production (AUMs)	Potential Forage (AUMs)	Long-term Change In Ecological Condition (acres) Poor	Fair	Good	Excellent	Long-term Predicted Livestock Production (AUMs)	Authorized Use (AUMs)
Page 435 of Draft RMP/EIS										
Alternative C (continued)										
0824	North Area	2,437	1,629	2,118	25	1,460	3,417	124	1,629	2,590
Page 443 of Draft RMP/EIS										
Corrected totals for Alternative C		**161,311**	**157,208**	**216,678**	**12,688**	**256,177**	**563,176**	**101,250**	**193,496**	**190,602**
Page 444 of Draft RMP/EIS										
Alternative D										
0322	Spring Creek	1,912	1,816	2,292	29	1,130	7,065	1,709	2,554	2,406
0323	Black Canyon	2,106	2,106	2,738	31	3,318	4,940	921	2,317	2,275
Page 445 of Draft RMP/EIS										
Alternative D (continued)										
0335	Shirley Mountain	3,655	3,265	6,969	75	5,499	3,707	1,190	4,168	3,957
0824	North Area	2,437	1,629	2,118	25	1,460	3,417	124	1,629	2,590
Page 454 of Draft RMP/EIS										
Corrected totals for Alternative D		**161,311**	**157,208**	**216,678**	**12,529**	**253,069**	**561,617**	**106,076**	**192,506**	**186,092**

STANDARD MITIGATION GUIDELINES APPENDIX

INTRODUCTION

This appendix is a revision of the standard protection requirements appendix in the draft RMP/EIS. These guidelines have been evolving from their beginnings as oil and gas lease stipulations to broader application to other land uses. We hope this will clarify the meaning, intent, and use of the guidelines.

About two years ago, the BLM developed the "Wyoming BLM Standard Oil and Gas Lease Stipulations." During implementation, the BLM recognized that similar kinds of environmental protection requirements should be applied to land uses other than those related to oil and gas exploration and development. Using the standard oil and gas lease stipulations as a basis, we began development of the "Wyoming BLM Standard Mitigation Measures for Surface Disturbing Activities" (called "standard protection requirements" in the draft RMP/EIS). The term *guidelines* better describes the intent and use of these mitigation standards than would *stipulations, measures,* or *requirements.*

These guidelines are used in the RMP/EIS process as a tool to help develop the RMP alternatives and to provide a baseline for comparative impact analysis through which we can arrive at RMP decisions. They will be used in the same manner in analyses of activity plans and other site-specific proposals.

These guidelines and their wording are a matter of policy. As such, further refinement in their wording and application may be made in the future. Any further refinement of these guidelines and any development of program-specific standard stipulations will be handled through administrative review, not through the RMP/EIS process. Appropriate public involvement and input will be included.

PURPOSE

The primary purpose of these guidelines is to attain statewide consistency in the method of determining requirements for avoiding and mitigating environmental impacts and conflicts among resources or land uses. "Consistency" does not mean that requirements would be identical for all similar types of land use activities or that the requirements for a given land use activity would be identical in all areas where it may occur.

Application of the guidelines is intended to (a) reserve for the BLM the right to modify the operations of all surface-disturbing activities as part of the statutory requirements for environmental protection, and (b) inform a potential lessee, permittee, or operator of the requirements that must be met when using BLM-administered public lands. The guidelines may be used directly as stipulations, or they may be modified with specific or specialized mitigation following the submission of a detailed plan of development or other project proposal and an environmental analysis.

Resource activities or programs without a standardized set of permit or operation stipulations can use the mitigation guidelines as conditions of approval or as a baseline for developing specific stipulations for a given activity or program.

There are two ways in which the standard mitigation guidelines are used in the RMP/EIS process:

> As part of the planning criteria used in developing the RMP alternatives, the Wyoming BLM standard mitigation guidelines become conditions of the actions being proposed or considered in each alternative as appropriate.
>
> In the analytical processes of developing the alternatives and analyzing the impacts of the alternatives, the guidelines are used for (a) development of a baseline for measuring and comparing impacts among the alternatives, (b) identification of other actions and alternatives that should be considered, and (c) determination of whether more stringent or less stringent mitigations should be considered.

Because the standard mitigation guidelines are integrated into the RMP/EIS process and used in conducting site-specific environmental analyses, the application of stipulations derived through the guidelines will provide more consistency with planning decisions and plan implementation than has occurred in the past. Application of the standard mitigation guidelines to all human-caused surface-disturbing activities on BLM-administered public lands will provide more uniformity in mitigation than has occurred in the past.

WYOMING BLM STANDARD MITIGATION GUIDELINES FOR SURFACE-DISTURBING ACTIVITIES

1. Surface Disturbance Mitigation Guideline

Surface disturbance will be restricted in any of the following areas or conditions. Modifications to this limitation may be approved in writing by the Authorized Officer.

a. Slopes in excess of 25 percent.

b. Within important scenic areas identified in a land use plan (Class I and II Visual Resource Management areas).

c. Within 500 feet of surface water and/or riparian areas.

d. Within either one-quarter mile or the visual horizon (whichever is closer) of historic trails.

e. Construction with frozen material or during periods when the soil material is saturated, frozen, or when watershed damage is likely to occur.

Guidance

The intent of the **surface disturbance mitigation guideline** is to inform interested parties (potential lessees, permittees, or operators) that when one or more of the five conditions (a through e) exists, surface-disturbing activities will be restricted or prohibited, unless or until the permittee or his designated representative and the surface management agency (SMA) arrive at an acceptable plan for mitigation of anticipated impacts. This negotiation will occur prior to development.

Specific criteria (e.g., 500 feet from water) have been established based upon the best information available. However, such items as geographical areas and seasons must be delineated at the field level.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals, such as, plans of development, plans of operation, or Applications for Permit to Drill and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

2. Wildlife Mitigation Guideline

a. To protect important big game winter habitat, activities or surface use will not be allowed during the period from November 15 to April 30 within certain areas encompassed by the authorization. The same criterion applies to defined big game birthing areas from the period of May 1 to June 30.

This limitation may or may not apply to extended long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects.

Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

b. To protect important raptor and/or sage and sharp-tailed grouse nesting habitat, activities or surface use will not be allowed during the period from February 1 to July 31 within certain areas encompassed by the authorization. The same criterion applies to defined raptor and game bird winter concentration areas from the period of November 15 to April 30.

This limitation may or may not apply to extended long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects.

Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

c. No activities or surface use will be allowed on that portion of the authorization area identified within *(legal description)* for the purpose of protecting *(e.g., sage/ sharp-tailed grouse breeding grounds, and/or other species/ activities)* habitat.

Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

d. Portions of the authorized use area legally described as *(legal description)* are known or suspected to be essential habitat for *(species name)*, which is a threatened/ endangered species. Prior to conducting any on-site activities, the lessee/permittee/operator will be required to conduct inventories or studies in accordance with BLM and Fish and Wildlife Service (FWS) guidelines to verify the presence or absence of this species. In the event that *(species name)* occurrence is identified, the lessee/permittee/operator will be required to modify operational plans to include the protection requirements of this species and its habitat (e.g., *seasonal use restrictions, occupancy limitations, facility design modifications*).

Guidance

The **wildlife mitigation guideline** is intended to provide two basic types of protection, seasonal restriction (a and b) and prohibition of activities or surface use (c). Item d, of course, is specific to situations involving threatened and endangered species. Legal descriptions will ultimately be required and should be measurable and legally definable. There are no minimum subdivision requirements at this time. The area delineated can and should be defined as necessary, based upon current biological data, prior to the time of processing an application and issuing the use authorization. The legal description must eventually become a condition for approval of the permit, plan of development, and/or other use authorization.

The seasonal restriction section identifies three example groups of species and delineates three similar time frame restrictions. The big game species, including elk, moose, deer, antelope, and bighorn sheep, all require protection of crucial winter range between November 15 and April 30. Elk and bighorn sheep also require protection from disturbance during the period of May 1 to June 30, when they typically occupy distinct calving and lambing areas. Raptors include eagles; accipiters; falcons (peregrine, prairie, and merlin); buteos (ferruginous and Swainson's hawks); osprey; and burrowing owls. The raptors, sage grouse, and sharp-tailed grouse all require nesting protection during periods between Feoruary 1 and July 31. The same birds often require protection from disturbance during the period of November 15 through April 30 while they occupy winter concentration areas.

Item c, regarding the prohibition of activity or surface use, is intended for protection of unique wildlife habitat areas or values within the use area. These areas or values must be fac-

tors that limit life-cycle activities (e.g., sage grouse strutting grounds, known threatened and endangered species habitat) that cannot be protected using seasonal restrictions.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals such as plans of development, plans of operation, or Applications for Permit to Drill and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

3. Cultural Resource Mitigation Guideline

When a proposed discretionary land use has potential for affecting the characteristics which qualify a cultural property for the National Register of Historic Places, mitigation will be considered. In accordance with Section 106 of the Historic Preservation Act, procedures specified in 36 CFR 800 will be used in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation in arriving at determinations regarding the need and type of mitigation to be required.

Guidance

The preferred strategy for treating potential adverse effects on cultural properties is *avoidance*, not prohibition. If avoidance involves project relocation, the new project area may also require cultural resource inventory. If avoidance is imprudent or unfeasible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protective barriers and signs, or other physical and administrative measures.

Reports documenting results of cultural resource inventory, evaluation, and the establishment of mitigation alternatives (if necessary) shall be written according to standards contained in BLM Manuals, in the cultural resource permit stipulations, and in other policy issued by the BLM. These reports must provide sufficient information for Section 106 consultation. Reports shall be reviewed for adequacy by the appropriate BLM archaeologist. If cultural properties on, or eligible for, the National Register are located within these areas of potential impact and cannot be avoided, the Authorized Officer shall begin the Section 106 consultation process in accordance with the procedures contained in 36 CFR 800.

Mitigation measures shall be implemented according to the mitigation plan approved by the BLM Authorized Officer. Such plans are usually prepared by the land use applicant's contract archaeologist according to BLM specifications. Mitigation plans will be reviewed as part of Section 106 consultation for National Register eligible or listed properties. The extent and nature of recommended mitigation shall be commensurate with the significance of the cultural resource involved and the anticipated extent of damage. Reasonable costs for mitigation will be borne by the land use applicant. Mitigation must be cost-effective and realistic. It must consider project requirements and limitations, input from concerned parties, and be BLM-approved or BLM-formulated.

Mitigation of paleontological and natural history sites will be treated on a case-by-case basis. Factors such as site significance, economics, safety, and project urgency must be taken into account when making a decision to mitigate. Authority to protect (through mitigation) such values is provided for in FLPMA, Section 102(8). When avoidance is not possible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, or other physical and administrative protection measures.

4. Special Resource Mitigation Guideline

To protect (*resource value*), activities or surface use will not be allowed (i.e., *within a specific distance of the resource value or between date-to-date*) in (*legal subdivision*).

This limitation may or may not apply to extended long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects.

Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

Example Resource Categories (Select or identify category and specific resource value):

a. Recreation areas.

b. Special natural history or paleontological features.

c. Special management areas.

d. Sections of major rivers.

e. Prior existing rights-of-way.

f. Occupied dwellings.

g. Other (specify).

Guidance

The **special resource mitigation guideline** is intended for use only in site-specific situations where one of the first three general mitigation guidelines will not adequately address the concern. The resource value, location, and specific restriction must be clearly identified. A detailed plan addressing specific mitigation and special restrictions on development will be required prior to development and will become a condition for approval of the permit, plan of development, or other use authorization.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals such as plans of development, plans of operation, or Applications for Permit to Drill and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

5. No Surface Occupancy Guideline

No surface occupancy will be allowed on the following described lands (*legal subdivision/area*) because of (*resource value*).

Example Resource Categories (Select or identify category and specific resource values):

a. Recreation areas (e.g., campgrounds, historic trails, national monuments).

b. Major reservoirs/dams.

c. Special management areas (e.g., ACEC, known threatened and endangered species habitat, wild and scenic rivers).

d. Other (specify).

Guidance

The **no surface occupancy (NSO) mitigation guideline** is intended for use only when other mitigation is determined insufficient to protect the public interest adequately, and it is the only alternative to "no development" or "no leasing." The legal subdivision and resource value of concern must be identified and be tied to an NSO land use planning decision.

Waiver of or exception(s) to the NSO requirement will be subject to the same test as was used to justify its imposition. If, upon evaluation of a site-specific proposal, it is found that less restrictive mitigation would adequately protect the public interest or value of concern, then a waiver or exception to the NSO requirement is possible. The record must show that because conditions or uses have changed, less restrictive requirements will protect the public interest. An environmental analysis must be conducted and documented (EA or EIS, as necessary) in order to provide the basis for a waiver or exception to an NSO planning decision. If the waiver or exception is found to be consistent with the intent of the planning decision, it may be granted. If found inconsistent with the intent of the planning decision, a plan amendment would be required before the waiver or exception could be granted.

When the "no development" or "no leasing" option is considered, a rigorous test must be met and fully documented in the record. This test must be based upon stringent standards described in the land use planning document. Since rejection of all development rights is more severe than the most restrictive mitigation requirement, the record must show that consideration was given to development subject to reasonable mitigation, including no surface occupancy. The record must also show that other mitigation was determined to be insufficient to protect the public interest adequately. A "no development" or "no leasing" decision should not be made solely because it appears that conventional methods of development would be unfeasible, especially where an NSO restriction may be acceptable to a potential permittee. In such cases, the potential permittee should have the opportunity to decide whether or not to go ahead with the proposal (or accept the use authorization), recognizing that an NSO restriction is involved.

References

ADDITIONAL REFERENCES

United States. Department of the Interior. Bureau of Land Management

Correction:

1984c "National Range Handbook: BLM Manual Handbook H-4410-1." Washington. Designed to supplement the *National Range Handbook* published by the Soil Conservation Service, U.S. Department of Agriculture.

Correction:

1987a *Draft Technical Reference on Grazing Management in Riparian Areas.* Prepared by Branch of Biological Resources, Denver Service Center. Denver.

1987b "Fish and Wildlife 2000: A Plan for the Future." [Washington.]

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1983 *Savery Project Preference Right Coal Lease Applications: Final Environmental Impact Statement.* Rawlins, WY. Prepared by Rawlins District, BLM, and Cheyenne District, GS. Cooperating agencies: Office of Surface Mining, U.S. Department of the Interior, and Forest Service, U.S. Department of Agriculture.

1984 *Amendment to the Hanna Basin Management Framework Plan and Draft Environmental Assessment.* Rawlins, WY. Cooperating agencies: Bureau of Reclamation and Office of Surface Mining, U.S. Department of the Interior.

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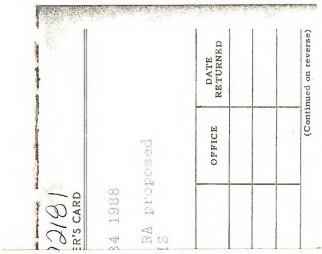
As the nation's principal conservation agency, the Department of the Interior has basic responsibilities for most of our nationally owned public lands and natural resources. This responsibility includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historic places, and providing for the enjoyment of life through outdoor recreation. The department assesses the nation's energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



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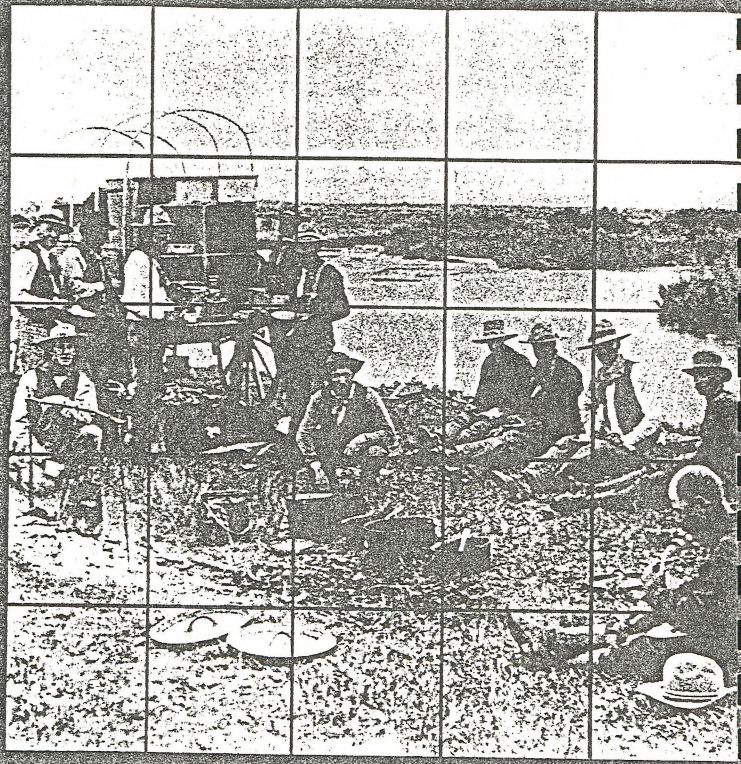

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